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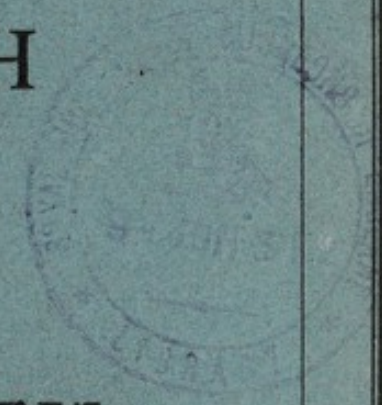


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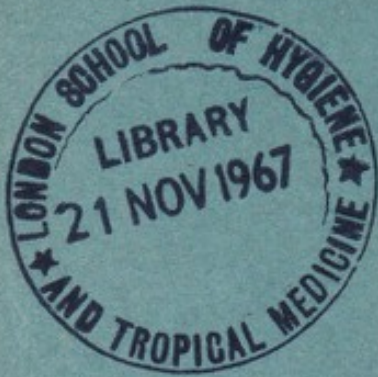
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THE
HEALTH
OF
PLYMOUTH
IN 1930.



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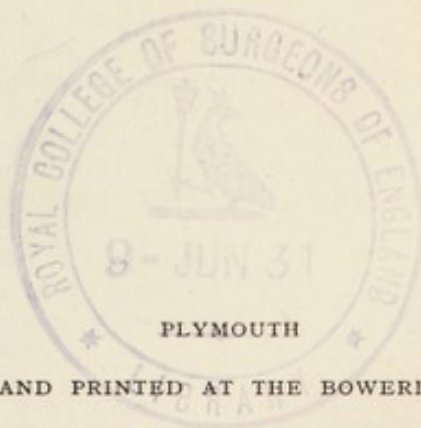


The Health of Plymouth in 1930.

BY

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1931

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GENERAL VITAL STATISTICS

(See Tables 1, 2, 3, 4, and 8.)

YEAR 1930.

Total population (estimated)	215,000
Births—Total belonging to the District after allowing for		
Inward and Outward transfers	.. .. .	3,421 ^A
Deaths—Total belonging to the District after allowing for		
Inward and Outward transfers	.. .. .	2,543
Birth-rate per 1,000 estimated population	.. .. .	15.9
Death-rate do. do. do.	.. .. .	11.8
Infant Mortality—Deaths under 1 year per 1,000 births		60



THE GENERAL PROVISION OF HEALTH SERVICES IN PLYMOUTH.

Medical Staff. DURING the past year two doctors on my Staff have died and three have resigned on account of ill health. Another resigned to take a better-paid appointment. These changes of staff are very bad for the routine work of a Public Health Department, and they result necessarily in lack of continuity of effort. At the end of the year there were still two vacancies in the School Medical Service.

In April, 1930, I became responsible for the work of one whole-time and nine part-time doctors, previously under the direction of the three Boards of Guardians; and also for the administration of the old Greenbank Poor Law Institution. This was appropriated by the Ministry of Health to the Public Health Committee as a Hospital on 1st April, 1930, and it became necessary therefore to staff it as such. This led to the appointment of a Medical Superintendent and two more Resident Medical Officers. In addition, two Consulting Physicians, two Consulting Surgeons, two Consulting Gynæcologists, three Consulting Ophthalmic Surgeons, and one Consulting Ear and Throat Specialist were appointed, all of which appointments are part-time appointments; and, with the exception of the Consulting Physicians, payment is made by fees for services rendered.

All members of my staff are appointed as Assistant Medical Officers. This gives me the opportunity of using their services in all sorts of ways. For example, if the Resident Medical Officer at Udal Torre Sanatorium is sick, any other of my doctors—for example, the Port Medical Officer—may be required to do work at that Sanatorium. Or again, the knowledge of the Tuberculosis Medical Officer may be utilised at the City Hospital, or the skilled surgical advice of the Medical Superintendent of the City Hospital may be available at Didworthy or at one of the school clinics; and so on. This occasional change of work is welcomed by the members of the Medical Staff, and all appreciate that they are not working in small water-tight compartments, but that each is a part of a much larger and more varied organisation.

Further details regarding the Staff are given at the beginning of this Report.

The work of the Plymouth Health Department has increased enormously during the past five years—quite apart from the take over of the Poor Law ; and for this reason our Staff to-day is greater than it was five years ago. During that period we have appointed two additional lady doctors for Maternity and Child Welfare work, one additional port medical officer, another school dentist, and a dental surgeon for persons who are tuberculous or who are attending our Maternity and Child Welfare Centres. This last appointment was made in June, 1930, and already this dental surgeon is overworked.

But it is better to be overworked than to have too little to do ; and I and all my Staff have felt this, especially during the past twelve months, when sickness and death among our numbers have put long hours and heavier burdens upon us all.

In the future we need especially to increase our Maternity and Child Welfare work, by opening new Centres at St. Budeaux, at Mutley, and at Laira. This will demand more medical staff. Again, as I have said in other years, we ought to have five school dentists ; but we have only three. This shortage leads to many of our school children having defective teeth.

Other Staff. A part-time Veterinary Surgeon acts for the Corporation. I should like to have two whole-time Veterinary Surgeons, who should be appointed to visit the hundreds of farms in Devon and Cornwall from which milk is sent daily to Plymouth. I know that much surgical tuberculosis, which is due to milk from consumptive cows, would be prevented if regular inspection of the cows by a Veterinary Surgeon could be attained. A thousand pounds a year, spent on the salaries of Veterinary Surgeons, might well save us double that amount, and avoid the expensive cure of crippled children.

The Public Analyst has his offices in Exeter. His work has increased considerably during the past five years. In 1925 he examined 513 specimens ; and in 1930 no less than 1,167 specimens. I should like to see a still further increase in this work, which results in preventing us from eating adulterated food. As it is, we do more sampling than most towns ; but I would welcome double the number of samples being taken every year. It is the only way of protecting

the public from food adulteration or sophistication, and of ensuring that the people get the nature, substance and quality of the food which they demand.

There are 19 Sanitary Inspectors, including Mr. N. Ruse, the Chief Sanitary Inspector. Nine of these officers are employed as District Inspectors, two for work under the Factory and Workshops Acts, two at meat inspection, two are engaged at work under the Housing Acts, one as a Sampling Officer for the purposes of the Food and Drugs (Adulteration) Act, and there is one Rat Officer and one Fish Inspector.

We have 12 Health Visitors for Maternity and Child Welfare visiting and three for tuberculosis visiting. It is a matter of great difficulty to obtain Maternity and Child Welfare Health Visitors—the supply is not equal to the demand. During the last few years we have found it increasingly hard to fill vacancies in our health visiting staff. The examination qualifications, demanded by the Ministry of Health, are so difficult and require so much time for their fulfilment that candidates are no longer presenting themselves in numbers for posts as Health Visitors. For these reasons some modifications appear to be necessary in the requirements of the Ministry of Health ; and, in my opinion, these might be considered without depreciating the quality of this essential Nursing Service.

Home Nursing. There are two Nursing Associations in Plymouth which undertake Home Nursing—namely, the Three Towns Nursing Association in Durnford Street, and the Alexandra Nursing Association in Devonport. Much of the work of these Nursing Associations is in relation to Childbirth, and each has its Maternity Home. Both Associations, however, do a certain amount of general sick nursing, and so far as they visit certain cases of Tuberculosis in the City they are paid by the City Council for these services. They do not visit infectious diseases.

Midwives. There are 61 Midwives practicing their profession in the City, and on the whole I am satisfied with the quality of their practice. The passing of time is removing certain of the oldest and least competent, and the new ones who take their places are well qualified in their theory and practice.

During the past four years we have held each Autumn in Plymouth a post-graduate course for Midwives, at which lectures

and demonstrations have been given. The object of this is to try to keep our Midwives up-to-date. The small fee of half a crown for a week's course is charged, and this covers the cost of the course. Midwives from Devon and Cornwall are invited, and during our 1930 course we had an attendance of 126 midwives. Work of this sort, although it is no part of our duty as a Public Health Department, is of extreme value and is very greatly appreciated by the earnest midwife, who appreciates the importance of her profession, and wishes to give her very best to her patients.

**Medical
Out-Relief.**

Last April the supervision of medical out-relief under the old Poor Law came under the control of the Public Health Department. The system of out-relief had been working well for some years and no alteration was made in it, with the important exception that the part-time general practitioners engaged in this service (nine in all) were asked to adopt the system of giving prescriptions, comparable to that in force under the National Health Insurance Act. This resulted in the closing of a dispensary in North Street. The advantage of this arrangement is that patients can go to any dispensing chemist in the City for their prescriptions to be prepared. This scheme has worked well since last September.

**Laboratory
Facilities.**

All the Bacteriological and Pathological work of the City is done by Dr. E. Wordley at the Laboratories of the South Devon and East Cornwall Hospital. During the past five years the work has increased considerably. For the year 1925 only 5,929 specimens were examined; but in the past year 16,197 specimens were reported on by the Pathologist. Table 18 gives a summary of the work of this Laboratory.

During 1930 no less than 1,222 milk samples were sent for examination. This may seem a large number, as indeed it is, but it represents only a small fraction of the milk which comes into Plymouth. I should like to see this service greatly extended, so that every churn of milk coming into Plymouth could be examined for the presence of dirt.

Hospitals.

I have been asked by the Ministry of Health to make a report on the various hospitals in the City and generally to survey their work in their various branches.

The Voluntary Hospitals have done great and good work in the past, but it is generally agreed that the system is incapable of that expansion necessitated by increasing knowledge and modern needs, and that early treatment, unhampered by vexatious restrictions, is not easily obtained. The fact is that times have changed, and economics now dominate the situation. Those who so generously supported the Hospitals in the past are now unable to do so, and so the help and care, in the past given by the individual, has now to be given by collective or State action.

Thus the social evolution, which is transforming life, is ensuring that sickness and invalidity shall receive prompt and immediate treatment irrespective of income. This is very fair and equitable—for everybody contributes according to means.

At the end of 1930 there was no hard and fast line and no great gulf between the Voluntary and the Municipal Hospitals ; for each helped the other. One group of hospitals, however, was paid for by Voluntary Contributions (mainly) and was governed by committees of persons who were not responsible to their Subscribers ; the other group was paid for by the rates (mainly) and was governed by committees of the City Council who were responsible to the rate-payers. But between the Voluntary and the Municipal Hospitals there is considerable co-operation ; each group is neither separable nor independent.

For example, at the South Devon and East Cornwall Hospital is situated the City Council's clinic for Venereal Diseases, and at the Royal Albert Hospital the Municipal Tuberculosis branch is housed. The Public Health Laboratory is at the South Devon and East Cornwall Hospital. Children from the School Clinics and Maternity Centres go for tonsil and adenoid operations and for orthopædic advice and treatment to the three general hospitals. Cases of puerperal sepsis and of surgical tuberculosis may also be admitted to the South Devon and East Cornwall, to the Royal Albert and to the Central Hospitals, and for these and for all the above-mentioned services the City Council pays. And the same applies to the special hospitals, such as the Ear, Nose and Throat and the Eye Infirmary. In other words, the Municipality works with the Voluntary Hospitals and makes much use of them, and pays these Voluntary Hospitals for their admirable work.

On the other hand, the Voluntary Hospitals make great use of

the Municipal Hospitals. They do not, however, pay for the services which are rendered, nor is payment demanded by the Municipality.

If infectious disease breaks out in a general voluntary hospital, the infectious persons are removed to municipal hospitals. If a case of Tuberculosis, as often happens, finds its way to a Voluntary hospital, the patient is transferred to a Municipal sanatorium. Advanced and incurable or chronic cases of disease are sent in large numbers every year from the three Voluntary Hospitals in the City to the Municipal Hospital, the City Hospital, at Greenbank. The services of the staff of my Department are always available for consultation with the staffs of the three Voluntary Hospitals.

Co-operation and co-ordination between Voluntary and Municipal effort exist most harmoniously and happily in the City, so far as day to day practice is concerned. We help each other so far as we are able.

But there does exist between these two groups, the Voluntary and the Municipal, a vague but formidable barrier ; and that barrier is a phrase of three words, " The Voluntary System." No one quite knows what these three words mean ; for patients themselves pay in voluntary hospitals, or belong to a Penny-in-the-Pound Scheme ; or the Municipality pays for them. The Voluntary Hospital Staff is not paid directly, but benefits in other directions through their association with the Voluntary Hospitals. The exact meaning and the right definition of " The Voluntary System " is not obtainable ; yet this vague phrase is the real barrier between these two systems of hospital management. And because it is so vague it is all the more difficult in the overcoming ; it is like trying to fight a ghost or a wraith of mist.

If all those interested in hospital work would consider in the first place, and in the second place, and in every other place the health and well being and cure of the sick, we should be obstructed no more by sloppy and meaningless catch words ; but should be able to go forward to the perfection of a great system of co-ordinated hospitals in our City.

The Voluntary Hospitals. The South Devon and East Cornwall Hospital is situated on rising ground on the north-easterly side of the City. It has 240 beds and is a general hospital, admitting practically every type of sick person. It has specialised departments, such as X-ray, Ultra Violet Light, Pathological and Cardiographic.

In this hospital there is a block allocated to the treatment of Venereal Diseases under the scheme of the Municipality. The hospital is administered by a Voluntary Committee. Further details are given in Table 19.

The Central Hospital is in Lockyer Street, near the centre of the City. It has 50 beds and receives medical and surgical cases. It is administered by a Voluntary Committee. Further details are given in Table 19.

The Royal Albert Hospital is situated in Devonport and contains 60 beds. Again, it is a general hospital, and is administered by a Voluntary Committee.

Plans are nearing completion when the amalgamation of these three hospitals will be accomplished. It is hoped that these three amalgamated hospitals will then be administered more economically and that a real classification of patients may be possible as between the three institutions. Incidentally, I can only hope that this unification will make it more easy to conduct negotiations between the hospitals and the Health Department ; for it is always more simple to deal with one authority rather than three.

The Ear, Nose and Throat Hospital has already amalgamated with the South Devon and East Cornwall Hospital.

The Eye Infirmary is situated at Mutley. It has 28 beds and is administered by a Voluntary Committee.

Municipal Hospitals. There are three Municipal Hospitals in the City—namely, the City Hospital, Mount Gold Hospital, and Swilly Hospital. There is the Hospital Ship *Flamingo* in the Port Sanitary Area ; and there are three other Municipal Hospitals outside the City boundary—namely, Didworthy Sanatorium, Udal Torre Sanatorium, and Lee Mill Smallpox Hospital. The Medical Officer of Health is the General Superintendent of each of these.

The City Hospital. This, before April, was a mixed workhouse holding about two hundred sick and infirm, and as many able bodied and lunatics ; some tramps, test workers and all the mixture of the old workhouse, which has been condemned for a century and more by Royal Commissions.

On April 1st, 1930, the buildings became appropriated for

hospital purposes to the Public Health Committee. The problem was how to make this mixed and unsuitable institution into a decent and well-run hospital. It was the sort of puzzle which is solved so easily in pantomimes by the waving of a fairy wand and the appearance of a transformation scene. In real life, however, it was extremely difficult. Nevertheless, slowly the able-bodied went; still more slowly the lunatics departed; the tramps went elsewhere and the test workers were found other labour yards. During April all the poor law sick were taken from Stonehouse and from Devonport to the City Hospital, and classification was, for the first time, attempted. I had been, in my few quiet moments, considering, during the previous twelve months, this exceedingly complicated "take-over"; and, when the time came, I was ready and able to make these complicated changes.

The buildings, except the actual hospital wards, were in a dreadful state of disrepair, decay and neglect; and, early in April, I began to have them made fit and decent for hospital purposes. At the end of 1930 the work was about half finished, and now we can house about 550 patients in reasonably clean hospital wards.

But apart from structural decay and disrepair, I found very much else wrong with the old Workhouse. Its laundry was, and is, almost comic in its inefficiency and wastefulness. The central heating at a vast expense (about £4760 per annum) heats a little hot water for the kitchen, laundry and wards; and steam leaks under most of the grounds of the City Hospital. I do not believe that you could look across any road or open space without seeing escaping steam. There was no X-ray plant. There was only one Resident Doctor. There was a shocking shortage of Nurses. There was an operation table not fit for any hospital, and there were practically no surgical instruments. The diets were dull and indifferently cooked and there was considerable wastage. Regarding this last, it has been calculated that during the last half of 1930 we have been saving food at the rate of at least £1,400 per annum at the City Hospital; and, at the same time, the patients have been better fed than ever they were before.

This shows how much had to be done in order to turn the old workhouse into the Modern Hospital. In this, the Public Health Committee and the City Council have helped me most eagerly; and, by the end of 1930, already very many improvements had been

effected. But very much yet remains to be done before ancient and derelict buildings can be converted to their best uses.

A pressing need at the City Hospital is an addition to the Nurses' Home. We have about 108 Sisters and Nurses there, and the Nurses' Home holds only 24. The remainder are housed in all sorts of unsuitable places—in an old army hut, in a loft, in wards which formerly were used for female lunatics. The accommodation for Nurses is bad and inadequate, and I should like to see undertaken during 1931 the erection of a proper home for our Nursing Staff. Their work is trying physically and mentally, and they should have a proper home in which to eat and sleep and rest. There is a saying that the merciful man considereth his beast. We ought to give our best to our Nurses.

But it is not beautiful buildings alone which make a good hospital. Far more important than these is a good medical and nursing staff, and this has now been obtained. The Public Health Committee, from the beginning, appreciated that a good and sufficient staff was essential for a first-class and efficient hospital; and such a staff, both resident and consultant, has now been obtained.

Further details regarding the City Hospital and the work there are given on pages 121 to 124 and in Table 19.

Mount Gold Isolation Hospital. This is a building for nominally 70 beds for the reception of cases of Scarlet Fever and Diphtheria. Owing to the prevalence of these diseases during the latter half of 1930, the wards have been overcrowded.

Swilly Isolation Hospital can take altogether 66 patients. It is used mainly for 40 cases of Tuberculosis (intermediate and advanced) in women and children; but towards the end of 1930 it was found necessary to admit cases of Scarlet Fever, and so to reduce the overcrowding at Mount Gold Hospital.

The "Flamingo" is a hospital ship of twenty beds anchored in Jennycliff Bay. I hope that before this Report goes to press the *Flamingo* will be surplus to our requirements and will have been sold by the Stores Committee. Her place will be taken by the new Smallpox Hospital at Lee Mill.

Didworthy Sanatorium is pleasantly situated in Dartmoor two miles north of South Brent and upon the banks of the River Avon.

Five years ago Didworthy presented much the same problem, on a small scale, as the City Hospital does to-day. But wonderful improvements have been made during that time, and a new ward and block has been built and another is now being constructed. Didworthy takes ninety patients—men, women, and children—and is kept solely for early cases of pulmonary Tuberculosis. Further details of the excellent work at Didworthy are given on pages 80 to 90.

Udal Torre Sanatorium (39 beds) at Yelverton is a private house rented by the Municipality for the treatment of Pulmonary Tuberculosis (intermediate and advanced) in males. It has altered but little, except in its transient population, during the past five years. It is not a place of which we can feel proud ; and it will be abandoned when our hospital re-organisation is completed in another year or so. Further details are given on pages 91 to 94.

Lee Mill Hospital was built in 1929 by the City Council, following on the urgent request by the Ministry of Health that we should make some provision on land for cases of Smallpox. Difficulty arose regarding the water supply at this new hospital, and last year the Public Health Committee decided on sinking a well and obtaining a direct water supply from it to the institution. This work was finished in January, 1931, and the furnishing of the Hospital was begun. The Hospital is now ready to receive patients. It has accommodation for twenty cases of Smallpox. I hope that in non-Smallpox times it will be used as a convalescent country home in connection with the City Hospital.

Hospital Re-organisation. While the Voluntary Hospitals are now proceeding with the consideration of their scheme for centralisation and for re-classification, the Municipality is well advanced with the re-organisation of its hospitals, which has been closely considered during the last five years.

Briefly the re-organisation will be as follows :—

- (1) Infectious Diseases will be centralised at Swilly Hospital. Extension of the wards, of the administration block, and of the Nurses' Home are rapidly nearing completion ; and the new Hospital for Infectious Diseases at Swilly should be ready for occupation next August. These additions and alterations will cost about £47,000.

- (2) Mount Gold Isolation Hospital will be converted into a hospital for intermediate and advanced cases of Pulmonary Tuberculosis in men and women. Udal Torre will then be closed and abandoned.
- (3) On the high ground immediately adjacent to the present Mount Gold Hospital a cripple and orthopædic hospital will be built, capable of receiving 120 patients. It is hoped that the foundation stone of this hospital will be laid before the Autumn of the present year.

I have referred in former reports to the great need for hospital re-organisation on these lines, and it is pleasant to be able to record that good progress is being made towards the completion of our schemes.

Maternity and Nursing Homes. There are fifteen nursing homes registered in the City, and all of them take in Maternity cases. No applications for additional registration were received during the year, and no registrations were cancelled. On the whole it may be said that these private nursing homes are reasonably well conducted. Being small homes they are not cheap in administration, and their charges are, therefore, necessarily higher than in other and larger establishments. These homes are frequently inspected by one of the Assistant Medical Officers.

Maternal Mortality. There were 26 deaths attributed to childbirth in Plymouth during the year. Of these 8 were due to Puerperal Fever or Sepsis; and 18 to other accidents of childbirth. These figures mean that out of every thousand births 7.6 women die.

Childbearing is not a disease. It is a natural process, and, as such, it ought not to be accompanied by any immediate mortality.

The prevention of the deaths of these mothers can best be accomplished by the following methods :—

- (1) The provision of sufficient maternity beds in a hospital.
- (2) Ante-natal care—that is to say, the close supervision of an expectant mother by her doctor during the period of pregnancy.
- (3) A better midwifery service—in other words, better trained doctors and better trained midwives.

Every case of maternal mortality which happens in Plymouth is most carefully investigated by one of the Assistant Medical Officers. A report on each death is sent to the Ministry of Health.

Homes for Children.

There is a home controlled by the Salvation Army for the care of mothers who are expecting illegitimate children. The confinements from this home take place in the City Hospital.

The Waifs and Strays Society has a home for babies at St. Gregory's, Peverell. It is well conducted and does good work. Few of the children, however, are Plymouth children.

There is a branch of Dr. Barnardo's Homes in the City.

Children under three years of age are cared for in a Nursery at the City Hospital.

Older children go to Stoke House or to one of the three Scattered Homes.

There is a Day Nursery at Looe Street, but it is hardly ever used to its full capacity.

The accommodation for illegitimate and homeless children in the City seems to be sufficient.

If Children's "Homes" are necessary (and they may be, as a temporary measure, for sorting houses), they should be in the country and not in the town. Even country "Homes" for children have many disadvantages; for they can hardly escape from the institutional atmosphere, and real home life is not found in them. In my opinion, it is far better for children to be boarded-out or lodged in decent families. To find good homes is increasingly easy in these days of childless marriages.

Mentally Defectives.

Institutional treatment for mentally defectives is found at Ford House, Devonport, for 75 cases. The majority of these patients are of a very low grade.

Accommodation is provided at Salisbury Road (non-residential) School for the attempted education of about 253 mentally defective children. During the past five years 269 children have passed from this school to the care of the Plymouth Voluntary Association for Mental Welfare, and I am indebted to the Secretary of that Association for the following details regarding the after-history of these mental defectives.

“The cases ‘notified’ to the Local Control Authority were all dealt with, either by Statutory Supervision, Institutional care, or being placed under an ‘Order of Guardianship.’ In addition, ten males and three females, having been referred to the Local Control Authority by the V.A.M.W., were placed under Statutory Supervision; one male was also placed under an Order of Guardianship—these fourteen cases had been referred to the V.A. for ‘After-care.’

“Of the cases left under voluntary supervision (‘after-care’) employment has been found for several, on farms, in Dockyard, or domestic service, one or two have joined the Army, and one, doing well for over a year, has been withdrawn from the register. Necessitous cases have been helped with clothing, etc., dental and other treatment arranged. In indifferent homes, in a few cases, visiting *has* brought about an improvement in the condition; as an indication of the changing ‘attitude’ of the public towards mental deficiency, it is a great satisfaction to find more and more friends and relations, as well as defectives themselves, voluntarily coming for advice.

“Fewer cases have been before the courts, of those referred to the V.A. or notified to the L.C.A. (Several cases have given trouble, found to be mentally defective, and dealt with under the Acts, but these attended elementary schools, and were therefore not recognised before leaving school and not referred.)

“During the five years, in addition to cases which have been ascertained through the Education Authority, there have been 454 others, all of which have been visited, some left under supervision, others dealt with under the Acts.”

In previous Reports and in other places I have said that it seems to be a great waste of public money to spend it upon attempts to educate people with defective minds. Perhaps we succeed in teaching them to be clean and attractive enough to entice some other mentally defective person into breeding with them—and the result is more defective children or idiots or imbeciles or criminals or prostitutes or paupers. Mental defect is a blight which is slowly spreading over our civilisation. The prevention of it lies in the sterilisation of the mentally unfit (a simple operation) or in their life-long imprisonment. By one of these two methods alone will the disease be stayed, which disease, if unrestrained, will ultimately

lead to the demoralisation and extinction of the brains in this country.

Ambulance Facilities. Cases of infectious disease are removed to hospital in one of the four Corporation ambulances. A motor van is kept at Didworthy Sanatorium for the purpose of connecting this isolated institution with the outside world.

Patients suffering from other diseases, who need removal to other institutions in the City, are conveyed by vehicles belonging to the local branch of the St. John Ambulance Association. This Society provides an admirable service in the City.

Clinics, etc. The City Council has provided various clinics for persons who require medical or surgical or dental treatment or advice. They are as follows :—

- (1) Maternity and Child Welfare Centre
and Ante-Natal Clinics Stonehouse Town Hall.
- (2) Maternity and Child Welfare Centre
and Ante-Natal Clinics Beaumont Park,
Plymouth.
- (3) Maternity and Child Welfare Centre
and Ante-Natal Clinics Wolseley Rd., Devonport.
- (4) Maternity and Child Welfare Centre
and Ante-Natal Clinics Devonport Park.
- (5) Venereal Diseases Clinic South Devon and East
Cornwall Hospital.
- (6) Tuberculosis Dispensary Beaumont House,
Plymouth.
- (7) Tuberculosis Dispensary Royal Albert Hospital,
Devonport.
- (8) School Clinic (Minor Ailments and
Dental) Princess Sq., Plymouth.
- (9) School Clinic Stonehouse.
- (10) School Clinic Albert Road, Devonport.
- (11) Dental Clinic (Maternity and Child
Welfare and Tuberculosis) Beaumont House,
Plymouth.

These Clinics and Consultation Centres are very popular, and are filled sometimes to overflowing.

It is proposed to establish additional Maternity and Child Welfare Centres as soon as possible, and also to develop a Consultative Out-Patient Department in relation to the City Hospital, where experts in Medicine, Surgery, Diseases of Women, Diseases of Children, and in Skin Diseases may be able to advise local medical practitioners regarding their patients. The proposed Out-patient Department will be something new ; for it will be merely consultative. No treatment will be given there, and patients requiring treatment will be referred to their own doctors. Indeed, it is proposed to see only those persons who come to the Consultative Clinics on the advice and with the introduction of their own doctors.

**Local Govern-
ment Act, 1929.** Reference has already been made to the part which the Public Health Committee has taken in carrying out its obligations under the Local Government Act, 1929, in respect to the Hospital and other Medical Services transferred to it.

The work done by the three previous Boards of Guardians has been or will be redistributed as follows :—

- (1) The medical care of the out-door and hospital sick passes to the Public Health Committee, together with the control of the Vaccination Officers.
- (2) The visiting of boarded-out children passes to the Maternity and Child Welfare Committee.
- (3) Children's Homes go to the Education Committee.
- (4) The able-bodied poor are relieved by the Public Assistance Committee, which provides residential accommodation at Ford House, Devonport.
- (5) Poor Law lunatics also go to Ford House, or to the Asylum.
- (6) Tramps will be found accommodation at the old Stonehouse Workhouse.

That, briefly, is how the scattered pieces, caused by the " Break up of the Poor Law," are being distributed. The various fragments will take some time before they settle down in their new places and under their new managements.

In order to facilitate the quick provision of Hospital Services, the Act provided that consultations should take place between representatives of Voluntary Hospitals and the Local Authority. These consultations have taken place in Plymouth, when the views and aspirations of all shades of opinion have been fully discussed

and debated. This free discussion can lead, I am sure, to nothing but ultimate good, although the spectre-phrase, to which I have already referred, namely, "The Voluntary System," has done its best to side-track some of the talkers into obscurity and confusion of thought.

Infectious Disease. *Scarlet Fever.* There has been a large amount of Scarlet Fever in Plymouth during the year. Altogether 1,077 cases were notified, 758 of which were treated in hospital. This number far exceeds any of the figures reached during the past five years.

On the whole, during the past few years, the incidence of infectious disease in Plymouth has always been light, compared to other towns in the country; but this past year we have shared with England and Wales a considerable increase in the amount of infectious disease. The type of Scarlet Fever, however, remains very mild, and out of 1,077 cases there were only 6 deaths.

Diphtheria continues to take its toll of infant life. Out of 629 cases notified, death occurred in 21 instances. Only early treatment can prevent a child from dying of an attack of Diphtheria.

DIPHTHERIA.

	1921	1922	1923	1924	1925	1926	1927	1928	1929
Attack Rate per 1000 : County Boroughs ...	1.5	1.14	1.04	1.11	1.34	1.44	1.5	1.7	—
Attack Rate per 1000 : Plymouth	1.32	1.01	0.8	0.94	1.48	1.52	1.97	2.17	2.45
Death Rate per 1000 : County Boroughs ...	.104	.089	.076	.068	.084	.094	.087	.091	—
Death Rate per 1000 : Plymouth ... ..	.065	.075	.05	.114	.042	.176	.123	.165	.12
Total Cases : Plymouth	263	203	154	184	307	282	372	423	525
Total Deaths : Plymouth	13	15	11	22	8	34	23	32	26
Case Mortality : Plymouth	4.9%	7.3%	7.1%	11.9%	2.6%	12%	6.2%	7.5%	4.9%

It is much better, and very much cheaper, to prevent a child from contracting Diphtheria than to attempt to cure a child who once has the disease. This prevention can be surely obtained by the

simple process known as "immunisation." The practice of immunisation has been triumphantly successful in the United States and in this country for the last twenty years or so, and where it has been practised on a large scale the amount of Diphtheria and the deaths from it have been reduced enormously. In Plymouth, free immunisation against Diphtheria is offered to all children at our Maternity and Child Welfare Centres. I hope to be able to arrange, during 1931, for the immunisation of children attending the infant departments in our City schools.

Other infectious diseases call for no particular comment in this general survey ; but some statistical details are given in Tables 4, 8, 41 and 42.

House Refuse. This Report would not be complete without my adverse comment on the methods adopted for the disposal of Plymouth refuse. These insanitary and objectionable methods are as follows :—

- (1) Refuse is burnt in an old and decadent destructor at Prince Rock. It is hopelessly antiquated and inefficient. As an example, it has not even a hydraulic press for compressing old tins ; so these are put on the ground and a steam roller goes over them. Amusingly enough, this destructor always is shut down for repairs in the height of summer, and this is just the time of the year when there is most bad meat and offal and putrid fish which ought to be burnt. Again, the destructor, when it is working, deals with only a small amount of the refuse of the City.
- (2) Some of the remaining refuse, mainly from the Devonport end of Plymouth, is dumped into a Barge which has its usual resting place at Pottery Quay. The barge gets fuller and yet more full, the refuse in it goes on decomposing, persons in the neighbourhood withdraw themselves and write letters to me complaining of some thing worse than a bad smell ; and then the barge goes to sea and deposits its cargo of loathesomeness into the waters. But most unfortunately, sometimes the weather is so rough that the barge cannot go to sea ; and it is forced to remain in Devonport, and its contents go on putrefying day by day until the weather is less unfavour-

able. No more filthy method of refuse hoarding and disposal could be imagined. It is even worse than tipping.

- (3) There are two sorts of tipping—controlled tipping (which can be a sanitary method of refuse disposal), and uncontrolled tipping, which is horrible. Our tipping in Plymouth is very uncontrolled—so uncontrolled, indeed, that rag-pickers pay to take back into Plymouth the muck which decent householders have cast away. The Municipality makes a few pounds a year by permitting rag-and-bone and scrap-iron and waste-product merchants to haunt these Corporation Tips and to collect and take back again to Plymouth the filth that no one of us will have in his house.

There are two of these uncontrolled tips in Plymouth. One is at Lipson at the Plymouth end, and the other at Camel's Head at the Devonport end of the City. The latter tip is the worse.

I was requested by the Works Committee during 1930 to rid these two tips of rats. During November and December this was done at the Lipson Tip ; and few, if any, rats remained at the end of the year. Enough poison was laid to destroy over 40,000 rats, and almost all of this was eaten ; in addition, the Tip was treated by Cyanide on several occasions and surplus rats destroyed by this means. Of course, these methods will be repeated, for there is no absolute finality in de-ratting.

With Camel's Head Tip, however, this de-ratting is a far more difficult problem, for the geographical conditions are not favourable. There is running water at both sides of the tip and a cemetery above it. Towards the end of December, however, a beginning was made at Camel's Head Tip with Cyanide and with other poison, and the work will continue until some measure of success has been obtained.

These uncontrolled tips should not be allowed to exist. Two decent modern destructors, one at each end of the City, should be constructed. These would eventually lead to the disappearance of rats and rag-pickers.

In the meantime, as a City with some claims to have a modern public health service, we cannot be other than ashamed with our present methods of refuse disposal.

Housing. This is a Survey Report.

When I survey the progress in housing during the last five years I find a difficulty in dealing justly with my review ; for we have done very much in one way, and practically nothing in another. During the last five years the Municipality has built 1,251 houses and 74 flats, and has caused no less than 2,956 other houses to be reconditioned. Now that achievement, especially the reconditioning, is a matter in which we may rightly congratulate ourselves ; for we have done as well as any other town in the kingdom, having regard to our population, and very much better than most.

But our bad patch, where we have lamentably failed, is in the abolition of our slum areas. Five years ago I scheduled three areas as slum areas which ought to be cleared. To-day, except for some admirable reconstruction work in one of them, nothing has been done. Now the Housing Committee, which recognises that Housing, like Health, should not be a matter of party politics, has readily agreed to the reconstruction of these insanitary areas, and the City Council has agreed to the recommendation of the Housing Committee. And there we are ! Everyone has agreed ; but nothing is done. A vast inertia seems to surround every active desire which would lead to slum clearance.

In December of last year I told the Housing Committee that there were other insanitary areas in the City, which, officially, I could well represent to them as such ; but that I was not prepared to waste the time of myself and of my small housing staff in making representations which resulted in nothing at all—as my previous representations had done.

If Plymouth *wants* to be a decent and clean city, that will surely come to pass. But if the people of Plymouth do not care, and if they prefer slum areas to decent houses, then, so long as they are apathetic, just so long will they get those slums and those houses which they deserve.

The City Council, three years ago, ought to have finished the clearance of three insanitary areas ; but nothing, except some patching and reconditioning, has been accomplished. We ought to clear several acres of the centre of the city in the Stonehouse area, and make it a clean and beautiful place of broad, tree-bordered streets.

So we have to ask ourselves, do we really want a clean city opened up with wide streets, instead of the shut-up slum where even the south-west wind is caught and trapped and made stagnant in our courts and alleys. Plymouth could be changed and made very beautiful and clean and healthy ; because it has great natural opportunities of position and climate.

Are we to leave it as it is until it falls still more into decay and insanitation ; or shall we have the vision and be brave enough to follow it—to the everlasting praise, not of our generation, but of those who will come after us ?

Regarding the provision of New Houses, I made a report last year to the Housing Committee stating that, so far as I could estimate, at least 2,232 new houses should be built during the coming five years ; and of these, that a thousand should be built as soon as possible. One difficulty, however, is likely to retard our progress in housing, and that is the lack of suitable housing sites around the city. This shortage of easy and cheap sites is another argument in favour of building centrally and of constructing lofty blocks of modernised flats on some of the insanitary and congested areas in Stonehouse. Other cities have done this very successfully, and we might well follow these examples.

Food and Milk. During the past five years the Public Health Department has spent much time and labour in attempting to make pure and clean the food supplies and milk supplies of the City. This work has increased year by year and has been generally successful ; so that the people of Plymouth are now buying food and milk free from contamination and of good quality.

Previous to 1925 only about a dozen samples of milk were taken every year for bacteriological examination. These figures have, however, grown year by year, and in 1930 there were examined to ascertain their cleanliness no less than 1,222 samples of milk, 23 of cream and 67 of ice-cream. Whenever the bacteriologist reports to me on the cleanliness of a sample, whether it be good or bad, I send a copy of this report to the retailer from whom the sample was purchased, and request him to give me an explanation if that milk is not reasonably clean. The milk retailer then takes the matter up with his producer in one of the County areas, and in several instances this has resulted in the producer of filthy milk having to give up

his business, for no retailer in Plymouth can be found to take this bad-quality milk.

Again, during the past five years in Plymouth we have encouraged the sale of "Designated Milks," such as Certified, Grade A, and Pasteurised; and at the end of the year there were three firms selling Certified and Tuberculin Tested Grade A Milk; and 39 firms selling Grade A and Pasteurised Milk. Whereas five years ago there were only seven sellers of designated milks in the City.

Frequent inspections are made of milk shops and dairies, and, speaking generally, the standard of cleanliness and sanitation is good in these premises.

Meat is inspected in the market and at the six private and registered slaughterhouses in the City. This work is done by two Sanitary Inspectors. The District Sanitary Inspectors also supervise meat and other food in the various retail shops and stores in their districts. These inspections result in much unfit food being seized or surrendered. Details of unsound food destroyed will be found in Tables 14 and 15.

Public Abattoir. No survey report on the sanitary circumstances of the City would be complete without my urging the necessity for a Public Abattoir. An ancient, decayed and unsuitable abattoir in the heart of the City, was closed in 1930, but nothing else has been built in its place. No sanitarian could deny that the six private slaughterhouses are inadequate and horrible, nor that they ought to be closed and demolished. But this improvement cannot take place until a City abattoir has been built. The matter has been discussed, ineffectively, for twenty years and more. Certainly this City, like every other important town, ought to have its own municipal slaughterhouse, where meat can be prepared under cleanly conditions and kept in cold storage until it is required at the various distributing centres.

Other Sanitary Circumstances. *Water Supply.* The water of Plymouth is good and soft. It is derived from the rain which falls on Dartmoor, and it is very slightly plumbo-solvent after prolonged contact with lead. It is very pure, both chemically and bacteriologically, and it is an ideal water supply for domestic and trade purposes. Burrator Reservoir on Dartmoor has recently

been enlarged and holds 1,026 million gallons of water. The average daily consumption of water in Plymouth is about 51.12 gallons per head of population.

Public Sanitary Conveniences. There are 80 of these in the City, 61 for men and 19 for women. During the past five years 5 women's and 4 men's additional conveniences have been constructed ; and, at the end of 1930, the Public Health Committee decided on further extensions. The rapidly growing margins of the City are badly served in this respect.

Bath and Wash-houses. There is an old and derelict building which is very poorly equipped in Hoegate Street. It ought to have been demolished fifty years ago, and decent baths and a wash-house built on the site. It is past all hope of repair, and it is now becoming a dangerous structure. When it has actually fallen down and killed some people, I shall happily be free of all responsibility ; for I have talked about this old place in season and out of season, and have urged that this City should have decent baths and wash-houses. But this is a "hardy annual," like housing, and refuse destructors, and abattoirs ; so all that I can do is to protest against these insanitary circumstances and leave the responsibility for their continuance to the municipality.

Offensive Trades. There are seven of these in the City, and they are conducted reasonably well. It must be appreciated, however, that an offensive trade is by its nature offensive, and cannot be otherwise. Persons employed on these premises do not appear to suffer in their health from the unpleasant smells and fumes which are generated in these trade processes.

Vermin Repression. Both at the Port of Plymouth and in the City constant warfare is carried on against rats. During the last three months of the year one of the Corporation tips (at Lipson) was de-ratted by means of poison baits and calcium cyanide. The proof that the de-ratting was fairly successful was found in the fact that no rat runs previously used were now occupied by rats ; and that no rats, or traces of them, were seen afterwards on the Tip or near the surrounding houses. Early in 1931 a similar clearance was begun at Camel's Head Tip.

Factories and Workshops. During the year 1,126 visits were made to factories, workshops and workplaces, and 62 nuisances were discovered. These were all abated.

Common Lodging Houses. There are six registered Common Lodging Houses in the City. They were visited 72 times during the year. The condition is fairly good.

Training of Sanitary Inspectors. During the past five years I have had the pleasure of helping to prepare young men for the examinations of the Royal Sanitary Institute and Sanitary Inspectors' Joint Examination Board, the passing of which qualifies a person for the appointment of a Sanitary Inspector. This work at Plymouth began in a small way ; but it has grown considerably ; and for the past three years the Plymouth Health Department has been officially recognised as an approved training school for would-be sanitary inspectors. The training consists of a six-month's course of lectures and demonstrations ; and up to the end of 1930 no less than 26 young men, who had successfully passed their examination, had secured appointments as sanitary inspectors in this and other countries.

The Population of Plymouth. The Registrar-General estimates the population of Plymouth to be 213,500 during the past year. Personally, I consider this to be an under-estimation. The Census, which is to be taken in 1931, will give us long-delayed particulars about our people and their environmental circumstances.

Unemployment. Apparently we have far too many people in Plymouth—more than the City can sustain. On 31st December, 1930, there were 6,773 men, 1,507 women, 138 boys and 139 girls out of work. Five years ago, on the 31st December, there were only 3,997 men, 547 women, 183 boys and 177 girls who were unemployed. There is room in this country, and in every other country, for a right number of women and men ; but, economically, there is no room for more. A book-case will hold just so many books, a bag or trunk will hold so much and no more, a field will provide fodder for just so many cattle, and Plymouth and England can find room and support and food and work for just so many people, and for no more. It would appear from Government figures that this country has two and half million people who are not wanted, they are surplus to the nation's present requirements. Yet we are consistently adding to their numbers by allowing our birth rate to exceed our death rate. In France, where the births have been equal to the deaths for many years, there is work for all and there is no unemployment. In this country, however, we go along lazily, letting

things alone, and allowing the insane and the waster to breed and multiply and replenish the Employment Exchanges.

The Birth Rate. Evidently our birth rate is too high. People who can bring up their children well and decently ought, with joy and delight, to bring up a few of these—their sure hold and grip on immortality. But the others—no. When a woman says to me that she has had ten children and she did not mind if the last six died or lived, I hear in her tale a definite begging for legitimised birth control. She wanted three or four children ; and, very properly she did not want any more, because she knew that she could not look after such a crowd, and all so young and helpless. Those who object to the reasonable limitation of families are generally spinsters or bachelors, who, unless they have special knowledge, do not know that to look after a baby is a whole-time job for a year or two. If another baby comes a year after the first, then it is overtime work for the mother ; and if more come too quickly, well then someone has got to be neglected. Undoubtedly to its parents the growing child, the adolescent, and the young adult is a real joy and delight and a perpetual reminder of everlasting life—but that happiness is not multiplied by an excessive number of offsprings, for then they become a mere burden, first to their parents, and then to themselves and to all of us.

Birth Control. Every educated young person of to-day knows as much, or more, about birth control as do his parents, and certainly more than his grandparents know. Considerations of this nature were considered indecent a quarter of a century ago. People blushed when the subject of limiting families was mentioned. To-day, however, we have a clearer and calmer and cleaner view of physiological facts ; and I am sure that this wider vision is good for our nation. Whether the limitation of families is taught at our maternity centres (as it ought to be), or whether it is not, we may be quite certain that it is practised widely among the people—except, of course, among the mentally defective and the brainless, and among those who cannot understand anything and do not want to learn anything and who do not hold with these new-fangled ideas. It would be an extremely interesting survey to study the mentality of the parents of all our young unemployed, and to investigate the sizes of their families.

Abortion. This is an unpleasant subject, especially in regard to the Laws of the State regarding it. I and my

Staff, especially the women doctors at the maternity centres, are aware that much abortion and still more attempted abortion takes place year after year in this City—and, of course, everywhere else. I believe that many of our maternal deaths are due indirectly to attempts at abortion during the first few months of pregnancy. Abortion is widely practised, although it is illegal ; so it is almost impossible to bring home conviction of it to anyone, even if such were desirable. We all know that there are occasions when a pregnant woman ought not to be allowed to produce a live child ; but we have no powers, at present, to prevent her from the further fouling of our population.

Deaths from all Causes, 1930.

Amongst the group of infectious diseases, Measles proved to be the most frequent cause of death. There were twenty-nine deaths due to this disease compared with four in 1929. The majority of these deaths occurred during an outbreak at the beginning of the year. However, the number of deaths from Whooping-cough fell from twenty-three in 1929 to four in 1930. For some obscure reason, an unusually high Measles death rate is often found associated with a low Whooping-cough death rate and vice-versa. The number of deaths from Influenza was low, only ten being recorded.

Cancer still shows itself to be an extremely common cause of death, there being 317 deaths due to this disease in 1930 against 297 in 1929. The Cancer death rate for Plymouth, like that for England and Wales generally, maintains the steady increase which has been evident during recent years. In 1930 there were 167 deaths from Pulmonary Tuberculosis and 33 from other tuberculous diseases, against 166 and 24 respectively in 1929, and 179 and 44 respectively in 1925.

The deaths attributed to Pneumonia and Bronchitis—two diseases whose prevalence is influenced by weather conditions—showed a notable decrease in 1930. Deaths due to Pneumonia numbered 244 in 1929 and 167 in 1930, and Bronchitis deaths numbered 317 in 1929 and 234 in 1930.

The total number of deaths under one year of age was 208, compared with 210 in 1929, and 262 in 1926. These figures show a remarkable saving in infant life and compare extremely favourably with the figures for the rest of the country. For the year 1929, in England and Wales as a whole, the number of deaths of infants under one year of age per thousand births was 74, and in Plymouth

for the same period it was 59.5. The neo-natal deaths or deaths of infants under one month, which are due almost entirely to congenital and obstetric causes, numbered 93 in 1930, 111 in 1929 and 106 in 1926. Many of these deaths may have been caused by attempts at abortion.

**Health
Education.**

At this stage in the evolution of the Public Health Services particularly, and in social evolution generally, it is wise to examine and reflect on *the whole* of the expenditure of the City Council.

Such reflection will lead to the inevitable conclusion that in some instances we are not spending money in the right way. We are over-spending on some of our services and under-spending on others. Let me give an instance. Dr. Poynder, the Medical Superintendent of the Mental Hospital at Blackadon, was asked recently if he could state what percentage of mental disease is due to bad teeth, septic tonsils, and other sepsis. In a written reply, he states: "One can safely say that at least 50 per cent of all mental patients are either due to, or aggravated by, septic foci, such as carious teeth, sinus trouble, septic tonsils; the former being, in my opinion, the most important factor." And yet extensions of the Dental Service have been opposed in the City Council, and it is extremely difficult to make the public realise that the CAUSES OF DISEASE MUST BE DEALT WITH.

The crossing at the Hyde Park Hotel at Mutley is no less dangerous now than it ever was. If I had to choose I would prefer to be killed outright at a dangerous crossing than to be condemned to the slow horror of mental disease. The Mental Hospital costs about £50,000 annually, so on this service alone we have been spending at least £25,000 for many years in dealing with defects which are obviously preventable. Why then should we not spend, say, £5,000 a year in trying to prevent them? Suppose we only prevented half—what a saving of public money that would be!

Let us consider how disease comes. All our lives we are assailed by the enemies of health; and we require, therefore, to learn the laws of health, for health and capacity are not innate nor do they come by chance or intuition. They have to be acquired. The neglect of healthy living costs the nation dear in money and in life, for the inhibitions and restrictions of ignorance in a right way of living, as Sir George Newman has pointed out, "impose upon

Great Britain much of its annual burden of disease, its millions of weeks of lost time owing to sickness, its tens of thousands of premature deaths, its numerous lunatics, 'deficient' persons and dullards, and its vast company of those who toil far below their normal health, capacity and contentment. The people perish for lack of knowledge."

Nature is not the cruel mistress we imagine her to be, for she is kind and bountiful in her gifts of sunlight, fresh air, food, water, and rest. But we have to *USE* these gifts. And we must build up our civilisation in accordance with the laws of Nature. All the disease and misery of the past, especially of the period of the Industrial Revolution, were caused by ignorance and the flouting of natural laws. A few pounds properly spent in Health Education in those days would have saved this country many millions a year nowadays.

Most people know a great deal about the value of cleanliness, fresh air and simple food, but they do not always practice what they know. They have not, in youth, contracted the habit of doing so.

Correct nutrition ensures perfect health. We could achieve a wonderful improvement in the health, vigour and symmetry of the race, if we applied our present knowledge to the daily selection of food for every family. An effective reform of our diet would also result in a great reduction of disease. I often wonder how many of those who read this Report, and read also "Better Health," try to follow the simple advice which we try to give them. Probably, only a fortunate few. The remainder prefer to go on in their old silly ways, until they are ill. Then they have to pay a bill to their doctor, which, had they wished, they might have easily and healthfully avoided.

Incorrect nutrition and the consequent faulty drainage of the human body is the main cause of disease. There is no clearer indication of the harm people are suffering from the increased use of unsuitable foods and unsatisfactory digestive processes consequent on them, than the death rate from Appendicitis as shown by some American records of 1929. Statistics covering twenty years show that the death rate from Appendicitis based on the returns from sixty American cities increased from 13.3 per 100,000 in 1910 to 15.7 in 1920 and 18.0 in 1929. This last is the highest death rate from Appendicitis in America and probably in any other country.

The mortality differs widely in different cities and varies directly with the population. For instance, in Lakewood, Ohio, with a population of 65,592 the death rate per 100,000 was 5.8, while in Chicago, with a population of 3,372,939, the mortality is 19.5. This suggests that in crowded communities the diet is more artificial and life more hurried.

Appendicitis is one of the many consequences of indigestion, or, in other words, of a digestive system in which the material is delayed, becoming stagnant and affecting the coats of the bowel, the result of constipation.

In striking contrast to the incidence of Appendicitis in civilisation, the records in British Somaliland show that out of a total of 27,575 hospital admissions of males only two were for Appendicitis, while no such case occurred among 8,818 women admitted.

I hope that the Government will give a lead on this subject of correct nutrition and will publish expert conclusions on the matter.

When the hospital buildings in the Re-organisation Scheme are completed we shall have a complete scheme for the treatment and cure of disease, and our efforts must be directed more, in the future, to dealing with the causes of disease and the prevention of disease, and I should like to see a great deal of research work done. The State and Municipality have done almost all that it is possible to do to provide means of health and the cure of disease, and the individual must now do his part. We must intensify our health education measures and ensure that children are trained in habits of health.

But "an educated people with a health conscience" can only arise by the fullest co-operation between the Health and Education Departments. The School Teacher has as great an influence in the child's life as the mother, and has many opportunities for training the child in health habits. I should like to arrange for *all* School Teachers to come for a Course of Instruction to the Health Department.

Now let us consider what is the best form of health education.

Pantomime, the dictionary meaning of which is "a series of actions or gestures used to convey ideas," has always been the universal means of communication. It was in universal use long before language was born. It is a fact that action is more generally understood than words. The lift of an eyebrow, however faint, may

convey more than a hundred words, and may mean a hundred different things, as that genius Charlie Chaplin has proved.

So the eye is better trained than the ear, and in health education we first appeal to the eye ; this has led to the Action picture on some health subject which is treated in a comic manner, for "comics" always appeal to children. I have always felt that educationists fail to make adequate use of the more quickly perceiving eye, but perhaps this will be corrected in the future and television will aid the teacher.

As was said in my 1927 Report, the principles of good Health Education and good advertising are synonymous, and are founded on a sound knowledge of psychology. We repress unpleasant emotions and remember those things which give us pleasure. Therefore, all good health education raises a pleasurable emotion. There is also the fact that 80 per cent of the people remember a picture better than they remember words.

**Plymouth—A
Health Resort.**

Where is the best place to spend the English winter? Many foreign Riviervas lack sanitation, ventilation, drainage, decencies—and in these things we have the advantage of them. It is not necessarily the sunniest climate that is desirable for Bronchitis and other chest diseases, but sunshine combined with an even and moderate temperature.

**The Best
Climate.**

The English Riviera has, in many ways, a better winter climate than the French and Italian Riviera, for the temperature of south-west England is much more equable in winter. The proximity of high snow-covered mountains is the reason for the sudden changes of temperature at night in the French and Italian Riviera. On the other hand, the warm waters of the Gulf Stream almost completely envelop the Devon and Cornwall peninsula and give us our equable climate. Another fact is that solar radiation is more intense in the south-west than in any other part of the British Isles, and so we get more health from the ultra-violet and infra-red rays of the sun.

Devon and Cornwall are far more lovely and healthy than the many foreign Riviervas, but what is needed is someone to "jolly" the place up. I suggest, therefore, that all the Local Authorities in Devon and Cornwall combine and appoint an Organiser, whose

business it shall be to attract warm-weather-lovers to the West. What we need is a genius who will make our Riviera more attractive than foreign Riviervas, more gay and light-hearted. Let us get rid of our English smugness and try the Carnival Spirit. Are we too puritanical to establish Casinos in aid of Voluntary Hospitals and Charities? And why not a Battle of Flowers? These added to our local attractions would encourage the spirit of healthy gaiety which attracts visitors. The railway companies can help both themselves and the Westcountry by extending the facilities for cheap railway travel. At present it is much cheaper to go abroad than it is to travel to the West from other parts of England.

It is necessary perhaps to emphasize the benefit to health of the whole sunlight on the whole skin. Dr. Saleeby has pointed out that such remarkable properties for our bodies have been found in ultra-violet rays as that they make Vitamin D in the skin. Similarly, the most remarkable properties for our bodies have been found in infra-red rays for they warm the blood without scorching the skin. They pass through the skin instead of being stopped by it, and heat it, and it is not until they reach the blood that they are stopped and absorbed. There is a special natural relation between sun heat and the blood of man, and we see, therefore, that sun heat and sunlight are real skin foods. In this connection the theory of fever is full of interest. The physicians of the past thought fever to be evil and sought to reduce it. To-day we know that fever is part of the body's means for self-defence. In the *warmed* blood defensive chemicals can be more quickly prepared, fighting cells multiply and are more efficient. But sun rays warm the blood and yet keep the body cool, because the infra-red rays specially seek the blood and are absorbed by it rather than by the skin or any other tissue.

Fogs, due to the combination of special atmospheric conditions (lack of wind, and coal smoke) have been more than usually severe this winter in London, the Midlands and the North. Our lungs were not made to breathe this poison gas. Many people who were laid up with Bronchitis and other chest diseases during the particularly bad ten days of fog in London came to Devon and were completely cured of their Bronchitis in a week. The summer of 1930 was a particularly sunless one, which is, perhaps, the reason that we are not so energised, and so fall victims to various infectious and other diseases.

Why should not England come to Plymouth for sunshine and mild airs, for lack of snow and for early Spring ; when primroses can be had at Christmas-time by those who care to seek them down the lanes of Devon, and where the wise thrush does not wait for his song until April ; in Plymouth the rain is over and gone, and the flowers appear on the earth earlier than in eastern and northern places. Spring comes soon to us and Autumn passes slowly, our Winters are mild and warm—and yet people who have Bronchitis go to the French and Italian Riveira. They would be better off at home, at Plymouth.

APPENDIX I

Additional Information Required by The Ministry of Health.

Statistics and Social Conditions. Area in acres, 5,711 ; population, 1921, 210,036 ; population, 1930, 215,000 ; number of inhabited houses, 34,217 ; number of families, 1921, 53,288 ; rateable value, 1930, £1,636,628 ; sum represented by a penny rate, £6,547.

Births (Legitimate)—1,657 males, 1,582 females. Total 3,239.

Births (Illegitimate)—96 males, 86 females. Total 182.

Birth-rate, 15.9.

Deaths. Total number of deaths, 2,543.

Death-rate, 11.8.

Number of women dying in, or in consequence of, childbirth, from sepsis, 8 ; from other causes, 18.

Deaths of infants under one year of age—Legitimate, 182 ; illegitimate, 26. Total, 208.

Deaths from measles (all ages), 29 ; whooping cough (all ages), 4 ; diarrhoea (under two years of age), 26.

General provision of Health Services :

- (a) Fever—Mount Gold Isolation Hospital, 80 beds ; Swilly Isolation Hospital, *66 beds ; *Flamingo*, 22 beds for Smallpox ; Smallpox Hospital, Lee Mill, 20 beds.
- (b) Tuberculosis and Maternity. See other sections of this report. *40 beds at Swilly Hospital are set aside for Tuberculosis cases.
- (c) Ambulance facilities. The Corporation has four ambulances for infectious cases. Other non-infectious and accident cases are dealt with by the St. John Ambulance Association.

- (d) Clinics and Treatment Centres. Five Maternity and Child Welfare Centres, one Day Nursery (voluntary), three School Clinics, two Tuberculosis Dispensaries and one Treatment Centre for Venereal Diseases.
- (e) Public Health Officers. See list at beginning of Report. In addition there are 10 District Sanitary Inspectors, 2 General Inspectors, 1 Rat Inspector, 1 Fish Inspector, 2 Housing Inspectors, 14 Health Visitors, and 9 School Nurses.
- (f) Professional Nursing in the Home. Home nursing is done for the Corporation by Nurses from the Alexandra Nursing Home and the Three Towns Nursing Association.
- (g) Midwives. A fee of 25s. is paid to midwives for attendance on necessitous cases when the patient is not entitled to Maternity Benefit under the National Health Insurance Act.
- Number of midwives practising in Plymouth, 85. Of this number 24 left during 1930, after completing period of training in the Three Towns Nursing Association.
- (h) Chemical work. Samples are sent to the City Analyst, T. Tickle, Esq., Exeter.

Sanitary Circumstances of the Area. I have nothing to add to my remarks of last year. Details of inspections are given in Table 12.

Housing. Statistics for the year are given in Table 17.

Inspection and Supervision of Food. See body of Report and Tables 14 and 15.

Prevalence of, and control over, Infectious Disease. See Appendix III, and Tables, 4, 7, 12 and 41.

Nursing Homes. Number registered under the Nursing Homes' Registration Act, 1927 :—

Maternity patients only	..	..	..	..	7
Mixed	..	..	..	..	7
Non-maternity	..	..	..	..	1

APPENDIX II

Maternity and Child Welfare Work.

BY MARION SMELLIE, M.A., M.B., D.P.H.

(Assistant Medical Officer.)

In 1925 the work of the Maternity and Child Welfare Department was carried on by one doctor, one superintendent health visitor, nine health visitors, and one chief and two assistant clerks. Six infant welfare and one ante-natal session were held each week, and 36,850 visits were paid by the health visitors in the course of the year.

In 1926 a second doctor was appointed. The infant welfare sessions were increased to nine, the ante-natal to four. A diphtheria immunisation clinic was started. A mercury vapour lamp was purchased and four sessions held weekly for the treatment of rickets by ultra-violet radiation. This method of treatment proved so effective that a second lamp was installed in the beginning of May, 1929.

The Wolseley Hall centre was opened in 1926. Beaumont Hut centre was opened in March, 1927, and the Embankment Road and St. Saviour's centres were closed.

In 1930 a third doctor was appointed (January 20th), and the Devonport Park centre was opened on 22nd May. The infant welfare sessions were increased to thirteen, the ante-natal to seven and the diphtheria immunisation to two.

The St. Aubyn Street centre has been closed since June, 1930, as the building was considered unsafe, and the work for the time being has been transferred to the Devonport Park centre.

To meet the extension of work, two additional full-time and two part-time health visitors (one temporary) have been appointed, and one full-time and one part-time assistant added to the clerical staff.

In 1930, 1,413 sessions were held, as against 409 in 1925, and this accounts for the fact that although the staff of health visitors was greater by two full-time and two-part time nurses, 6,295 fewer visits were paid to mothers and children in their homes in 1930 than in 1925.

The Devonport Park Hut is a model welfare centre. The building is ideal and is heated and lighted throughout by electricity. The opening of this centre was one of the most interesting features of the year.

At all the centres work is carried out under much more favourable conditions than it was five years ago.

Much progress has been made in the past five years, marked not only by the extension of clinics and the growing size of the Department, but by greater knowledge amongst the people themselves, and a greater desire to learn. Patient teaching and example in time break down the old-fashioned prejudices and lead to general enlightenment and progress, and what was scoffed at yesterday is accepted as a matter of course to-morrow. Much remains to be done, and this should be an incentive to future effort for :—

*“ Progress ” is “ man’s distinctive mark alone,
Not God’s and not the beasts’ :
God is, they are ;
Man partly is, and wholly hopes to be.”*

Ante-Natal. Since February, 1930, two ante-natal sessions have been held each week at the Town Hall and at Beaumont Hut instead of one as formerly. It was becoming increasingly difficult to cope with the work satisfactorily in one session, but the appointment of another Doctor to the Staff enabled us to hold the extra session. The St. Aubyn Street ante-natal session has been held at Devonport Park since June, so that there are also two weekly sessions at Devonport Park. One session at Wolseley Hall meets the demands for that area, making a total of seven ante-natal sessions each week. In addition all the ante-natal work of the Three Towns Nursing Association is done by one of the doctors on the Maternity and Child Welfare staff.

Prospective mothers are slowly but surely being educated to realise and value the benefits of ante-natal care, and with the individual demand for a higher standard of skilled supervision and attention through pregnancy and labour, improvements in our

midwifery service are bound to follow. Even in the last year or two the attitude of the mothers has appreciably changed; now they freely seek and regard as their right the care and advice at which they so recently looked askance. It is quite the exception now for any woman to object to medical examination. They welcome it and the sense of security it brings.

Everything possible is done to encourage the regularity of attendance which is essential for successful supervision. Roughly 32 per cent of the expectant mothers attended the ante-natal clinics.

The attendances have been as follows :—

	First attend- ance.	No. of Primi- paræ.	Post- natal at- tendances	Total attend- ances.
Town Hall	253	70	82	1148
Beaumont Hut	226	51	98	1132
Devonport Park	210	50	73	816
Wolseley Hall	82	26	43	336
Three Towns' Nursing As- sociation	359	117	—	1603
	<u>1130</u>	<u>314</u>	<u>296</u>	<u>5035</u>

In this series of 1,130 cases the following abnormalities occurred :—

Breech presentation, 26 : Twins, 8 : Contracted pelvis, 28 : (Induction, 4 ; Cæsarean, 5) : Albuminuria, slight, 85 : severe, 5 (2 Stillbirths) : Eclampsia, 1 : Syphilis, 11 (2 Stillbirths) : Gonorrhœa, 6 : Leucorrhœa, 170 : Hyperemesis, 5 : Cardiac disease, 53 : Varicose veins, 103 : Respiratory diseases, 36 : Hydramnios, 7 : Skin diseases, 24 : Hernia, 4 : Carious teeth, 321 : Inverted nipples, 7.

In addition there were many cases of minor digestive disturbances.

Although dental caries was present in 321 cases, only 88 actually proceeded for treatment. There is still great reluctance to undergo dental treatment during pregnancy, and the onus of refusal is invariably placed on the husband.

Post-Natal. The post-natal attendances are increasing, but fall considerably short of what they ought to be. Amongst the 197 examined there were 10 cases of prolapse of the uterus, 20 of retroversion, 14 of sub-involution, 5 of fibroids, 5 of salpingitis, 18 of tears or ulceration of the cervix, 12 of cystocœle, 7 of rectocœle, 7 of cystitis, 2 of cervicitis. So that roughly 50 per cent were in need of some form of treatment.

Fifty-eight cases were sent to Maternity Homes to be confined, either for medical or social reasons. Since April all such cases have been admitted to the Maternity Wards of the City Hospital.

In 47 necessitous cases the midwife's fee was paid by the Local Authority. Application has to be made beforehand, so that the case comes under medical supervision.

Sterile Maternity Outfits. The demand for these has been small, but has increased of late. Any practising midwife can procure these sterile outfits at cost price, and in special circumstances a reduced charge is made. Four were supplied at 5s. each and 13 at the nominal rate of 2s. 6d.

Maternity Bags. Twenty-six were lent and with one exception were returned in good condition at the end of four weeks. A deposit of 2s. is forfeited if the bag is kept longer than four weeks.

Home Helps. Home helps are sent out on request to confinement cases to take over the household duties for a period of two weeks. Their services may also be utilised in cases of illness during pregnancy, and where the mother has to be confined in hospital. It is a much needed and greatly appreciated service. A list is kept of several suitable women who are willing to go out to a case when called upon. Their work is closely supervised by the Health Visitors, and on the whole is satisfactory. Sixty home helps were supplied during the year, as against 42 in 1929.

Supervision of Midwives. Eighty-five notified their intention to practise in the City at the beginning of 1930. Twenty-four have since left the City, and at the end of the year there were 61 names on the list of practising midwives. Thirty-two are engaged in private practice, and 2 of these are *bona fide* midwives; the others are attached to Institutions. There are no municipal midwives. In 1925 there were 42 midwives in private practice in Plymouth.

Of the notified live births (3,419) 2,244 (65 per cent) were attended by midwives only, and a further 583 by midwives acting

as maternity nurses, so that at 82 per cent of the notified births a qualified midwife was present.

Medical help was summoned by midwives in 870 cases, that is in 38 per cent of the cases attended by them.

The following are the conditions for which medical aid was sought :—

Albuminuria	..	..	..	26
Œdema	..	..	..	4
Epilepsy	..	..	..	1
Fainting attacks	..	..	..	4
Unsatisfactory condition of mother—				
Ante-natal	..	..	66	} 91
Post-natal	..	..	25	
Varicose veins	..	..	..	8
Malpresentation	..	..	..	56
Contracted pelvis	..	..	..	16
Prolonged labour	..	..	..	169
Premature labour	..	..	..	5
Hæmorrhage—				
Ante-partum hæmorrhage	..	..	37	} 47
Post-partum hæmorrhage	..	..	10	
Uterine inertia	..	..	..	9
Prolapse of cord	..	..	..	2
Stillbirths	..	..	..	5
Collapse of mother	..	..	..	2
Ruptured perineum	..	..	..	170
Retained membranes	..	..	..	22
Rise of temperature	..	..	..	30
Phlebitis	..	..	..	1
Sub-involution	..	..	..	2
Miscarriage	..	..	..	21
Discharging eyes	..	..	..	97
Foetal distress	..	..	..	3
Death of infant	..	..	..	2
Feeble infant	..	..	..	47
Deformity of infant	..	..	..	9
Phimosi	..	..	..	4
Skin conditions (rash, septic spots, watery blisters, impetigo)—				
Baby	..	..	15	} 17
Mother	..	..	2	

It will be noted that 177 were calls on behalf of the infant, and that discharging eyes accounted for almost half of these. All practising midwives are supplied with colossal silver for use as a prophylactic against discharging eyes, and this undoubtedly is of great value. That "discharging eyes" should occur in 4 per cent of these cases does not seem excessive, although it leaves a good margin for improvement.

Regular inspection of the midwives' work is carried out by one of the doctors on the Maternity and Child Welfare staff, and on the whole their work is satisfactory. Several have been interviewed for minor breaches of the Rules of the Central Midwives' Board. There have been no suspensions from practice for more than twenty-four hours.

Post-Graduate Course for Midwives. A very successful course of post-graduate instruction was held at the Town Hall, Stonehouse, from October 6th to October 11th inclusive. One hundred and twenty-six midwives attended; 36 coming from Cornwall and 16 from Devon, and several of these had saved a week of their holidays to enable them to attend. The enthusiasm and keenness displayed by the midwives was ample reward for the work involved. As formerly, lectures and practical demonstrations were arranged on subject of interest. An innovation was a display of medical films, and this proved a very popular method of instruction. We are greatly indebted to the lecturers who gave their services free, and to a generous citizen for coming to our rescue with his Kodascope when the one hired for the occasion broke down.

Letters of thanks were received from the Secretaries of the Devonshire Nursing Association, the Plymouth Branch of the Midwives' Institute and from county midwives, and everything points to this post-graduate week becoming established as an annual event.

**Nursing
Homes.**

There are now 15 registered homes in the City. All are regularly visited and inspected by one of the doctors on the Maternity and Child Welfare staff. Four small maternity homes were closed during the year. There were no new applications for registration.

**Convalescent
Homes.**

Nine debilitated expectant mothers were sent to the Home of Rest at Plympton for a period of two to three weeks and greatly benefited thereby. Unfortunately there is still no convalescent home in the neighbourhood to which children may be sent.

Dental Treatment Since the beginning of June all cases have been dealt with by the dentist appointed to do the combined dental work of the Tuberculosis and Maternity and Child Welfare Departments. The following are the figures for the year :—

Children, extractions only	146
Expectant and nursing mothers—	
Extractions only	21
Extractions and fillings	11
Extractions and dentures	55
Fillings only	1

For children no charge is made for treatment. The mothers pay on a scale according to income. Thirty-six had free treatment ; 27 paid 25 per cent of the cost ; 22 paid 50 per cent and 3 paid the full cost.

Puerperal Pyrexia and Puerperal Fever. Only 52 cases were notified, as compared with 62 in the previous year. Twenty were notified as puerperal fever (4 deaths), and 32 as puerperal pyrexia (2 deaths). Nine cases were notified from Maternity or Nursing Homes, the remainder occurred in the district.

Thirty-six cases were removed to hospital for treatment (24 being treated in the City Hospital).

In 5 cases the rise of temperature was due to septic abortion, and subsided after the appropriate treatment in hospital.

In 32 (6 B.B.A's.) of the remaining 47 cases, the pyrexia followed spontaneous labour and in 15 instrumental labour. Ten of the instrumental labours were first labours, and approximately one third of all the cases occurred in primiparæ. Also, in about one third of the cases retained products were held accountable for the rise of temperature.

Available bacteriological data are scanty and incomplete. In 7 cases a non-hæmolytic streptococcus was cultured from the uterus or cervix, in one a hæmolytic streptococcus, in 3 a streptococcus unclassified, in 3 staphylococcus aureus, in 4 staphylococcus albus, in 2 bacillus coli and in 1 a Gram positive coccus. In no case were any organisms cultured from the blood. In 8 cases there was a bacillus coli infection of the urinary tract. There were 3 cases of pelvic abscess and the causal organism was different in each case, being (1) hæmolytic streptococcus, (2) non-hæmolytic streptococcus,

(3) bacillus coli. In one case of pyæmia which recovered, the same organism, a non-hæmolytic streptococcus, was cultured from the uterus and the abscess.

In only 7 cases was the pyrexia attributable to causes other than sepsis, and excluding these cases the puerperal sepsis rate for the year is 12.5 and the puerperal sepsis death rate 2.2 per 1000 registered births.

The following is a brief synopsis of the six fatal cases :—

- (1) Primipara aet, 28. Instrumental labour. Onset first day, died sixth day. Laceration of cervix and vagina, retained products, gangrenous endometritis, peritonitis, streptococcus cultured from uterus and peritoneal fluid and bacillus coli from the urine.
- (2) Primipara aet, 27. Instrumental labour, easy. Onset second day, died twelfth day. Endometritis, non-hæmolytic streptococcus grown from the uterus. Blood sterile. Baby died of pyæmia.
- (3) Primipara, aet 25. Spontaneous labour. (Maternity Home.) Onset second day, died thirteenth day. Parametritis, septicæmia. Cultures from uterus, blood and throat all negative. Contact with measles.
- (4) Multipara, aet 26. Spontaneous labour. Onset fourth day, died seventh day. Retained products. Uterus—non-hæmolytic streptococcus. Blood sterile. Contact with impetigo contagiosa.
- (5) Primipara, aet 26. Spontaneous labour. Onset second day, died twenty-third day. Scarlet fever coincident with labour. Septicæmia. Throat, streptococcus. Uterus, staphylococcus.
- (6) Primipara, aet 39. Prolonged instrumental labour with manual manipulations. Onset second day, died thirtieth day. Pneumonia, septicæmia. Urine, bacillus coli, and pus; sputum, hæmolytic streptococcus.

The early onset of illness in all six cases is worthy of note, and that five of the six were primiparæ, three labours spontaneous and three instrumental. Of the three spontaneous labours, one was a multipara in poor general health in contact with impetigo in her own home, one was examined during labour by a nurse who developed measles two days later, and the third had at the onset of labour a streptococcal tonsillitis which proved to be scarlet fever, there was no suspicion of infection being conveyed by the attendant midwife.

From five of the six cases a streptococcus was cultured, and in two of the cases the streptococcus was definitely classified as non-hæmolytic. This is interesting in view of the fact that as recently as 1930, Colebrook and Hare reported from their observations that as a rule the non-hæmolytic streptococcus was associated with the milder infections.

As puerperal sepsis, unless accompanied by a certain degree of pyrexia, is not notifiable, the number of notifications does not give a complete record of the incidence of puerperal sepsis.

See Table No. 7.

**Ophthalmia
Neonatorum.**

The services of the district nurses are available for the home treatment of discharging eyes, they attend as frequently as desired by the doctor in charge of the case. Removal to hospital is advised in all severe cases. The whole cost of treatment is born by the Local Authority, so that blindness or impairment of vision should not occur from lack of facilities for treatment.

Midwives have been supplied with Collosal Argentum for use as a prophylactic since June, 1928. In spite of this, the number of cases notified has increased from 28 in 1928, and 29 in 1929, to 43 in 1930. Midwives sought medical aid for discharging eyes in 97 cases in 1930, as against 84 in 1929, and 55 in 1928. Fortunately this increase in the number of cases of ophthalmia neonatorum is mainly due to better notification by the doctor, and to a stricter interpretation of Rule E 21 (5) of the Central Midwives' Board by the local midwives.

**Maternal
Mortality.**

There were 26 maternal deaths in 1930, as compared with 17 in 1929. This return does not include women who aborted, or were confined without the City area, and subsequently died in a Plymouth Hospital or Nursing Home.

Even so, the maternal mortality rate for the year is 7.2 per 1,000 registered births (i.e. live births plus stillbirths) and 7.6 per 1,000 live births, which is above that for England and Wales. It may be that the increase is more apparent than real, owing to more complete notification of the cause of death and to close scrutiny of the death returns.

It is difficult to estimate how far social causes such as unemployment and poverty, by lowering the individual resistance to disease, have affected the maternal mortality rate. Is induced abortion more frequent in times of economic stress? Dr. Louise McIlroy states that "Abortion when criminally induced is an increasing cause of maternal mortality. It accounts for many gynæcological affections and may cause sepsis at a subsequent confinement." Two of the 26 deaths were the direct result of sepsis following abortion. In at least 6 cases, poverty and overwork were important predisposing factors. All but 2 were married women. The ages at death are interesting, 2 were under 20 and 2 over 40 years of age, 4 between 20 and 25, 10 between 25 and 30, 2 between 30 and 35, 6 between 35 and 40. Nine were primiparæ.

Excluding the abortions, 3 deaths were due to or accelerated by concurrent disease (bronchiectasis, virulent measles, and scarlet fever), 8 were due to puerperal sepsis, 2 to embolism (? sepsis), one to acute post-partum dilatation of the heart, 5 to hæmorrhage (A.P.H. 4, P.P.H. 1), 3 to eclampsia, 1 to hyperemesis, 1 to post-partum shock.

Each of the 26 deaths was investigated, and a report forwarded to the Ministry of Health for the purposes of their inquiry on maternal mortality.

Infant Mortality. The total number of deaths under one year was 208, i.e. 60.5 per 1,000 live births. Ninety-three died within twenty-eight days of birth. A glance at Table No. 3 in the Appendix shows that quite 43 per cent of these deaths were due to congenital debility, malformation (16 per cent), or prematurity (27 per cent), 22 per cent to respiratory diseases, 11 per cent to digestive disturbances, and 5 per cent to specific infectious diseases.

The most important causes of death are premature birth (27 per cent) and respiratory diseases (22 per cent), and the least important the acute specific infections. It will be noticed that whereas the death rate from congenital debility, malformation, and prematurity is approximately the same as last year, there are slightly fewer deaths from respiratory diseases, but almost twice as many from digestive disturbances.

Several interesting facts emerge from the League of Nations' Inquiry into the Prevention of Stillbirths and Infant Mortality,

e.g., "That where general conditions are favourable the greater number of deaths occurred during the obstetrical period and in connection with respiratory diseases, while in districts where the conditions were unsatisfactory, the relative importance of these two causes is less marked owing to the higher proportion of deaths due to infectious diseases and digestive disturbances; and that unfavourable housing conditions appear to have less effect on pre-natal and neo-natal causes of death than on post-natal causes."

On the whole Plymouth ranks as a district where the general conditions are favourable.

Stillbirths. 179 stillbirths were registered, making the stillbirth rate for the year 49.7 per 1,000 total registered births. Only 126 were notified, 76 by doctors. Thirty-nine were midwives' district cases, and 29 occurred in maternity or nursing homes.

The available information is very far from complete. In a series of 54 cases, 31 (i.e. 51 per cent) occurred at term, 8 were due to A.P.H., 3 to albuminuria, 1 to eclampsia, 11 to abnormal presentations, 16 were macerated, and 2 had congenital abnormalities incompatible with life. In 16 cases there was a history of one or more previous stillbirths. Twelve occurred in primiparæ. In 34 cases where the age of the mother was recorded, one was under 20, seven between 20-25, eight 25-30, six 30-35, ten 35-40, and two over 40 years of age.

The League of Nations Inquiry into the Prevention of Stillbirths and Infant Mortality has demonstrated that whereas the infant mortality rate varies greatly in different areas, the stillbirth rate and the mortality during the first few days of life vary but little, and, if anything, tend to diminish as the social scale is descended.

Summer Diarrhæa. There were 24 deaths from this cause under 1 year, and 2 between 1 and 2 years. Nineteen deaths were of babies under 6 months. Only 18 cases were notified. Thirty-one cases were investigated (23 deaths), and 9 of these (5 deaths) occurred in institutions. In one institution (a Home for Babies under 2 years) there was a serious outbreak of acute gastro-enteritis in April, and 3 babies died. In September there was a second outbreak in the same institution, but this time of a much milder type. Both outbreaks were investigated, all bacteriological examinations proved negative, and the general routine and manage-

ment of the home was excellent. As a new admission was suspected of introducing the infection in the first outbreak, a second room is now provided for the preliminary isolation of new admissions.

Inquiries showed that 21 of the babies were having raw milk of some sort, 5 dried milk, 3 sweetened condensed milk, and only 2 breast milk. This would seem to emphasize the greater danger of infection attached to feeding with raw milk.

Health Visiting.

For health-visiting purposes this City is now divided into thirteen districts, for each of which one health visitor is responsible. On an average each health visitor has 276 births to visit. Births are visited as soon as possible after the third day, and regular visits are paid thereafter until the child reaches the age of five and comes under the Education Authority. In 1930, 12,151 visits were paid to children under one year, and 15,740 to children aged one to five years. More than 10 per cent of the babies visited were artificially fed at the age of two weeks, and 22 per cent at the age of one month. The health visitors do all that they can to encourage breast feeding, and they find that an early visit is a great help in this respect. The busy midwife has little time to devote to the problems of difficult lactation.

Infant Life Protection Work.

Was transferred to the health visitors as from April 1st. This makes considerable demands on their time and is oft-times tedious work.

One hundred and forty-one notifications were received, 140 were registered and one refused. During the year the names of two foster-mothers were struck off the register, and the children concerned removed;—one to the City Hospital, the other to another foster-mother.

The above-mentioned are included in the following return:—

Removed—

(1) to care of relatives	..	..	22
(2) to care of official organisations	..	..	5
(3) to care of other foster-mothers	..	..	5
Over seven	..	..	4
Died	..	..	2
Adopted (Adoption of Children's Act, 1926)			4
Left district	..	..	1

**Ultra-Violet
Light Treat-
ment.**

Two mercury vapour Hewittic Levick Ulviarc lamps are in use four mornings each week. The total attendances for the year were 3,677, the average attendance per session being 18. Of the 252 cases entered on the register 246 started treatment in 1930.

Each individual attends twice weekly. More or less the same routine of work has been observed as during the previous year, and in addition records are now being kept of heights as well as weights. Up to the present this treatment has been free, but it is just possible that a small fee paid at the beginning of the course would be a security for future regularity of attendances. Much time has been spent in rounding up defaulters, and the full benefits of treatment are not obtained with irregular attendances.

The lamps are chiefly used for the prevention and cure of rickets. In families with a history of rickets it would seem logical to start prophylaxis with irradiation of the expectant mother, and to follow up later if necessary with irradiation of the child. In the few cases where this has been possible the results were very satisfactory.

The conditions treated were :—

Rickets, 119 cases. Twenty-five—the majority of these were under eighteen months—completed a course of treatment and were cured, 37 are still under treatment (of these, 30 are improved clinically in X-ray or both, 7 are just starting treatment), whilst 51 ceased to attend after a few exposures. In several cases cessation of treatment was due to illness at home, making it impossible for the mother to attend, a few families left the district, but in the majority of cases there was no reasonable excuse for non-attendance.

Prophylactic treatment was given to 6 babies.

Twelve cases with marked deformity were sent to Dame Hannah Rogers' Orthopædic Hospital at Ivybridge, and several others were referred to the Orthopædic Department of the South Devon and East Cornwall Hospital for out-patient treatment.

Malnutrition, 46 cases. Twelve ceased to attend before the seventh exposure, 12 are still under treatment (4 starting, 5 improving and 3 showing marked improvement). Twenty-four attended sufficiently long for the effect of treatment to be appraised, 5 did not improve, but 19 were definitely improved, e.g., one child *aet*

2 years and 4 months, whose weight had been stationary for 4 months, gained 2 lbs. in 3 months. Another *aet* 1 year and 9 months and unable to walk alone, was walking after 7 exposures, and gained 2 lbs. in 2 months.

Debility following acute illness, 10 cases. Three ceased to attend (under 6 exposures), 5 were improved, 1 did not seem to benefit, and 1 is still attending and improving satisfactorily.

Chronic Bronchitis, 4 cases. Two were greatly improved, 1 attended very irregularly and did not improve, 1 ceased attending after the third exposure.

Tuberculous adenitis (cervical), 2 cases. One responded well, and a discharging sinus healed up after 13 exposures. The other left Plymouth after the sixth exposure.

Skin diseases, 18 cases.

Seborrhoic dermatitis, 3 cases. One much improved, 2 not much improvement and treatment discontinued.

Papular urticaria, 2 cases. One improved, but diet, etc., closely supervised; the other *aet* 2 years and 6 months had been neglected and had a widespread secondary pyogenic infection. After four months the skin was perfectly clear, and the child had gained 4 lbs. in weight. No relapse up to date.

Infantile eczema, 7 cases. Six ceased to attend after the first few exposures, one attended irregularly, no permanent improvement.

Dermatitis, 3 cases. Two, of hands, improved. One surrounding old osteomyelitis wound of leg, marked improvement.

Intertrigo, 1 case. Improved.

Impetigo contagiosa, 2 cases. One of face, well with five exposures, the other, of scalp, improved, but relapsed owing to faulty home conditions finally sent to hospital.

Failing lactation. Eleven cases were recommended but only 3 attended regularly. Of the latter one mother was enabled to continue breast feeding with an abundant supply of milk and the baby gained 3½ lbs. in two months. Another mother who was obliged to resort to temporary supplementary feeding was able to

carry on with breast feeding only after 10 exposures, and the baby gained 2 lbs. in less than two months ; and a third, with a very poor milk supply, was enabled to continue part breast feeding for four months. Irradiation is undoubtedly of great value in cases of failing lactation, provided the mother really wishes to nurse her child and is able and willing to co-operate. Pressure of work at home may prevent a mother from attending a clinic, but many are mainly indifferent and apathetic, and nothing will induce them to try to nurse their children.

Ante-natal. Sixteen expectant mothers started treatment, but only 7 persisted with it. All 7 were unanimous in stating that they felt better whilst having ultra-violet radiation (5 had spontaneous and 2 instrumental labours and all the babies made good progress). Three were mothers of rickety children, and their babies to date show no signs of rickets. All the babies were breast fed.

Diphtheria Immunisation. For the convenience of those residing in the Devonport area, an immunisation clinic was opened at Devonport Park Hut on 29th May, 1930. It has proved very popular and has relieved the congestion at the Town Hall immunisation clinic.

There has been no further alteration in the routine procedure of immunisation. Susceptible children are given three l.c.c. doses of toxoid-antitoxin at monthly intervals and are Schick tested five weeks after the third injection. The injection is more or less painless, and in young children there is seldom any local or general reaction. Six months is the ideal age to start immunisation, thus securing immunity for the child before it is a year old.

As is well known, individual susceptibility to disease varies greatly and although 3 injections protect the average child, there are those who require 4, 5, 6, or even more, injections before they become immune. No child is discharged as protected until he gives a definite negative result to the Schick test.

Seven hundred and ninety-one new names were entered on the register during the year, and the total attendances numbered 3,107. The average attendance at the Town Hall was 44 and at Devonport Park Hut 28 per session.

Unless for some special reason primary Schick-testing is not

carried out on children under nine years of age. Two hundred and seven primary Schicks were done, 124, i.e. 60 per cent, being positive and 75 negative.

Age grouping of primary Schicks.

		4-7 yrs.		8 yrs.		9 yrs.		10 yrs.		11 yrs.		12 yrs.		13 yrs.		14 yrs.		15 yrs. and over	
		N.	P.	N.	P.	N.	P.	N.	P.	N.	P.	N.	P.	N.	P.	N.	P.	N.	P.
TOWN HALL		—	2	—	6	3	20	11	16	3	21	14	9	9	11	10	7	12	8
DEVONPORT PARK		2	—	—	—	1	2	2	5	2	8	1	1	2	6	1	—	—	—
		2	2	—	6	4	22	13	21	5	29	15	10	11	17	11	7	12	8

N — Negative P — Positive

These results are comparable to those of previous years, and show the large percentage of susceptible children right up to 13 years of age.

Eight primary Schicks were done on children who had had Diphtheria, and 5 gave a positive result. (Four are now negative, and one is still to test.)

Four hundred and forty-four children received a course of three l.c.c. injections of T.A.M. Of these, 347 have been Schick-tested, 287 were negative and 45, i.e. 13 per cent, remained positive. Seventeen of the 45 became negative after one further injection, 2 after two injections, 5 after three injections, and one remained positive after three injections. The others left the district or for other reasons ceased to attend.

Four children contracted diphtheria before completing the course of three injections, but throughout the year no case of diphtheria occurred in a Schick negative protected child.

1929 cases. One hundred and sixty-three children who had their course of three injections in 1929 were Schick tested in 1930, 9, i.e. 5.7 per cent, were positive, 147 negative and 7 were not read. This low percentage of positives was very satisfactory, but unfortunately it has not been maintained, and for 1930 the percentage of positives has risen to 13. Even 13 per cent positive, however, is an improvement on previous years, when 19 to 20 per cent remained

positive after a course of three injections. It should be noted:

1. That the slightest reaction is regarded as a positive result.
2. That for the past two years the Schick test has been done three months after the first injection, and that previously it was done after a period of six months. Bearing this in mind, the results are probably better than they seem, as the 13 per cent positive would be still further reduced were the Schick test delayed another three months. It is not considered advisable to do this, as the present arrangements work so smoothly, and there is no difficulty whatsoever in getting the children up for the final test at the stated time, i.e. five weeks after the third injection. Formerly many forgot to return at the end of six months, and even a written reminder was frequently disregarded.

Since diphtheria immunisation was started towards the end of 1926 over 1,400 children have been immunised. This represents a very small proportion of the susceptible child population, and although invaluable for the individual, is not in itself sufficient to influence the incidence of diphtheria in the City for the present. When it is regarded as a matter of course that every child should be immunised on reaching the age of six months, then preventive medicine will have scored another triumph, and diphtheria will no longer take its annual toll of child life.

I have very great pleasure in again thus publicly acknowledging the valuable work done by our Voluntary Workers, for which we are deeply grateful, and I would also like to thank the Inspectors of the N.S.P.C.C. for their very willing help in dealing with difficult cases.

Beaumont Hut Maternity Centre.

BY M. A. THYNNE, M.R.C.S., L.R.C.P., D.P.H.

(Assistant Medical Officer.)

Five years ago one session a week was held at each of two centres to serve the needs of the Mothers and Babies of the eastern end of the City. These two centres were held at St. Saviour's and at Embankment Road. Although these premises were the only available ones at that time, they were very inadequate for the work. There were no separate waiting or weighing rooms ; the babies were actually weighed in the doctor's room. In spite of these and other difficulties, 2,010 babies were seen by the doctor and 4,331 children were weighed.

There were no ante-natal or post-natal clinics, no clinic for children from one to five years, and no sewing classes.

In March, 1927, Beaumont Hut was opened, and gradually absorbed the mothers who had previously attended St. Saviour's or Embankment Road centres. The work has increased each year until at the present time seven sessions are held weekly at Beaumont Hut. These include sessions for infants, for children between one and five years, ante-natal and post-natal clinics, and sewing classes. During 1930 there were 3,212 children seen by the doctor and 8,813 children weighed.

Two hundred and twenty-six expectant mothers made a total of 1,132 attendances. There were also 105 post-natal attendances.

The four Health Visitors who now work in the area from which Beaumont Hut draws the mothers are very ably assisted by a loyal and dependable band of seven voluntary helpers, two of whom have given regular service for the past six years. I take this opportunity of expressing gratitude to them all for their dependable help so readily given. That trained workers and those untrained can combine in regular effort, not only without friction, but with great goodwill to produce effectual results, speaks volumes for all concerned. The assistance of voluntary workers gives the Health Visitors more time for employing their training and skill in giving advice to the mothers.

A recognition of the fact that the centre exists for prevention

and education and not for treatment is becoming more widespread. The greater number of children who were referred to their own doctor for treatment (52 in 1930, as compared with 4 in 1925) arises partly from the fact that although the mothers know they will not obtain *treatment*, they nevertheless come to ask for an opinion as to whether medical treatment be necessary. The medical officer of the centre can give such an opinion and refer a mother to her own medical adviser. Thus, mothers who cannot see any necessity in attending the centre regularly will still avail themselves of its services when need arises.

The number of educated and well-informed mothers who attend for advice continues to increase.

One great advantage which the medical officer of an Infant Welfare Centre enjoys over a private practitioner is in the allowance of time that can be devoted to nervous children. At the first visit such children sometimes cause a riot in the weighing room by their loud and violent objections to being placed on the scales. This state of fear and irritability may persist in spite of all the patient efforts of the nurses. It being quite useless to attempt to make a physical examination of a child in such a state, the mother is asked to bring the child in week by week, simply to say "good morning" to the nurses and doctor, and perhaps play with the toys, but without further notice from anyone. The reason for this request is explained to the mother, and, in her eagerness to obtain a manageable child, she follows out directions and comes regularly. At the third or fourth visit the small person is weighed and docilely permits the doctor's examination, and finally becomes friendly with everyone. At this stage the re-education of mother and child can be begun without difficulty or harassment. The time involved in dealing with these children is out of all proportion to that which normal children require, but the success achieved is well worth the time and patience involved.

Thread Worms. In the Annual Report for 1925, in the section devoted to a consideration of the Water Supply, it was suggested that sewage organisms (such as B. Coli) might be carried on the feet of gulls to the drinking water contained in the reservoirs. Shortly after this the Medical Officer of Health made an investigation in the hope of proving or disproving this possibility. A solution of methylene blue was sprayed on some gulls whilst they were feeding on the sewage in the Sound. Later these "blue" gulls were observed on the Crownhill reservoir.

It is an established fact that one of the most efficient vehicles for the transportation of fresh water nematodes is the feet of flying water fowl. Therefore it seems reasonable to suppose that the eggs of human parasitic worms might also be carried in the same way. It has been proved that these eggs are carried on the feet of flies from filth to food. The likelihood of their transference from sewage to drinking water on the feet of gulls is worthy of consideration and investigation. At a moderate computation each adult thread worm produces some 200,000 eggs. Individuals who harbour these parasites pass them at frequent intervals. The eggs of the worms, which are present in faecal matter, contain living embryos. It has been proved that these embryos can remain alive for three days in tap-water, and from four to five days in normal saline. Presumably if at this stage they were ingested by a human they would proceed to develop. As oxygen is necessary to maintain life in these embryos they tend to float on the surface of any fluid in which they are placed. The egg shells are somewhat glutinous and adhere not only to each other but to any foreign body which breaks the surface of the water. Conditions, therefore, appear favourable for the direct transmission of the embryonated eggs from the sewage in the Sound to the reservoirs, the feet and feathers of gulls acting as carriers.

With the consent of the Water Engineer a haul with a very fine tow net was taken of the Crownhill reservoir. Judging from the large quantity of feathers floating on the surface it appeared probably that sewage constituents might be found. On microscopical examination nematode eggs were seen, but proof that these eggs were those of thread worms has not yet been obtained. Repeated examinations will be necessary to prove or disprove the possibility of the transference of eggs in this way.

My cordial thanks are given to Dr. Allen and the staff of the Marine Biological Laboratory, without whose generous assistance much of this work would have been impossible.

In houses where a common tap supplies the need of several families it was thought that possibly the film of moisture on the tap handle might be a mode of spreading the infection of thread worms. In order to obtain information on this point a series of microscopic films taken from tap handles were examined. Each tap was used by twenty or thirty individuals and in each house at least one child was known to be a carrier of thread worms. All these films proved to be negative.

It is probable that the eggs of thread worms are scattered in dust. The thick shell membranes make the embryo within very resistant to drying. The floor is the playground of small children. If one member of a household is harbouring worms, the eggs will almost certainly be present in the dust on the floor. While investigating a case of continued re-infection, I have seen a child place on the floor a piece of bread and butter he had been eating, while he played with a toy. Presently, the bread and butter was resumed. These activities alternated until hunger was appeased. The bread, no doubt, was a very good vehicle of infection. This and similar methods of infection must be repeated in hundreds of houses where insanitary conditions prevail.

Of the 510 children between one and five years who attended Beaumont Hut during the past year, 64 were carriers of thread worms. Most of these children were members of families in which several other individuals were also infected, but a few were only children, who received every possible attention to cleanliness. Detailed information of the circumstances, diet and habits of these families have been collected as far as possible. In the course of time some constant factor necessary for the transmission and growth of the thread worm may appear from these data. Smears from the nails and anal region of infected children attending the centre were taken. The actual taking of these smears before the mothers serves as a good object lesson to them for the necessity of scrupulous cleanliness of the hands.

As a control, anal smears of the children in the nursery at the City Hospital were examined. Except in one case these were negative. Further investigations are in progress.

Wolseley Hall and Devonport Park Maternity Centres.

BY IRIS V. I. WARD, M.D., B.S. (Lond.), M.R.C.S., L.R.C.P.

(Assistant Medical Officer.)

One of the features of the year was the opening of the new Child Welfare and Maternity Centre in Devonport Park. This took place on the 22nd May, and the first clinic was held there on the 27th May. The new Hut is a spacious, light and attractive building in which it is very pleasant to work.

Diphtheria immunisation was started at this Devonport centre on 29th May, and soon became popular, so that at the end of the year there were 298 cases on the register.

Mothers also began to tell their friends about it, and it has been interesting to ascertain by questioning them how they came to hear of the immunisation. By far the greatest number come as a result of the indefatigable work of the health visitors. Now and again one meets with a case of criticism, and on investigation one finds that the latter is due to misunderstanding. One inoculation only cannot protect against diphtheria, and immunisation is not guaranteed until the full course has been taken, and a negative Schick test obtained and a certificate given.

Breast feeding is not as popular as it should be. So many mothers fly to bottle-feeding on the slightest provocation and do not realise that breast feeding, besides being easier, cleaner and safer, allows the child to absorb protective substances against diseases which the mother has experienced. Worms are very common, and the frequency of deafness among adults emphasizes the importance of treating all otorrhœa in children, however slight, with great care.

Several obstinate cases of infantile eczema have occurred in the clinics, and ultra-violet light is being tried, but there have not been enough cases or controls yet to enable us to come to a definite conclusion as to its value.

Finally, the need for more houses is urgent. Many cases of malnutrition and chronic bronchitis can never hope to improve under the present housing conditions, where damp and darkness are rife. Many mothers of families are doing all in their power to rear healthy children and are handicapped by the accommodation. Wolseley Hall clinics are attended by many people who fully appreciate the benefit they received when they were able to move into an area where the housing is more satisfactory, and the care expended on the children gives encouraging results.

APPENDIX III

Control of Infectious Disease in the City.

BY E. J. HYNES, F.R.C.S. (Edin.), D.P.H. (Lond.).

Scarlet Fever. During the year 1930, 1,077 notifications of Scarlet Fever were received. Of these, 758 were treated in the City Isolation Hospitals. In addition to these, 31 cases were admitted from outside the City.

The incidence of Scarlet Fever has been much higher than usual.

The number of cases requiring hospital treatment has taxed our accommodation to the utmost, although two extra wards were opened at Swilly Hospital to deal with the overflow from Mount Gold. This demonstrates the necessity for the larger Isolation Hospital now nearing completion.

The following Table shows the number of notifications for the last fifteen years :—

<i>Year.</i>	<i>Scarlet Fever cases notified.</i>		
1930	1077
1929	366
1928	167
1927	323
1926	606
1925	633
1924	364
1923	332
1922	357
1921	410
1920	432
1919	320
1918	350
1917	232
1916	369

The average stay in hospital per patient has been 25 days.

Last year it was 29.53 days. Patients have been discharged as early as possible, in some cases, perhaps, earlier than was desirable, as it was necessary to make room for others urgently needing hospital treatment and isolation. In spite of this, only 17 return cases were notified (i.e. second cases of Scarlet Fever occurring within 28 days of the return home from hospital of a previous patient).

The percentage of return cases, 2.15, is below the usual average.

There were 5 deaths :—

- 1 from septic Scarlet Fever.
- 1 from Pyæmia, which was admitted after having been treated at home for a fortnight for Scarlet Fever.
- 3 from Scarlet Fever with coincident Diphtheria.

Treatment. As usual Scarlatina Antitoxic Serum has been given to all cases admitted in the acute stage. Scarlet Fever occurs in epidemic waves, is endemic in all our large cities, and often assumes epidemic prevalence at intervals of about five years. It is said to present an even better marked epidemic wave every thirty years. The last epidemic in Plymouth, as can be seen from the previous table, occurred in 1925-26.

The present epidemic continued into the early part of 1931, and is now rapidly declining.

Diphtheria. During the year 629 cases were notified. Of these 591 were admitted to the Isolation Hospitals. In addition, 41 came in from outside the City area. One hundred and sixteen were found, after observation in hospital and repeated bacteriological tests, to be suffering from diseases other than Diphtheria. These were sent home when well enough to travel.

The number of deaths in Hospital was 21, being 17 from Diphtheria and 4 from diseases other than Diphtheria :—

- 1 from Meningitis.
- 1 from Broncho-pneumonia.
- 1 from Marasmus.
- 1 from Measles.

(These cases did not have Diphtheria.)

All the cases that died had been ill for several days before they were admitted to hospital and came in with the disease in an advanced stage. One died fifteen minutes, another eight hours, after admission. In 8 cases the parents admitted that the child had been ill for from four to six days before being sent to hospital. Patients who come into hospital before the disease has become advanced recover.

It is encouraging to be able to say that fewer cases came to hospital in a hopeless condition during this year than in previous years. In consequence the mortality is considerably lower :—

					<i>Diphtheria</i> <i>Mortality.</i>	
1930.	Total admissions from the City	591	..		17	
1929	„ „ „ „	484	..		22	
1928	„ „ „ „	391	..		29	
1927	„ „ „ „	357	..		20	

The Prevention of Diphtheria. Free immunisation has been provided as before at the Town Hall, Stonehouse, and at the Welfare Hut, Devonport Park.

Next year an attempt is to be made to immunise children under the age of seven years attending the Council Schools. If the children's parents will take advantage of this, it should much reduce the mortality from Diphtheria in future years.

Enteric Fever. Six cases were reported, but no case was treated in the Plymouth Isolation Hospital.

Chicken Pox. Eight hundred and sixty-nine cases were notified. These were visited and examined by a member of the medical staff in their homes to ensure that there was no undiagnosed case of Smallpox among them.

Smallpox. No cases were notified during the year.

SWILLY HOSPITAL

Pulmonary Tuberculosis. Two wards have been open for the treatment of female patients suffering from advanced Tuberculosis. During 1930, 85 patients have been admitted. Twenty-three died during the year, 21 went home much improved, 8 were transferred to Didworthy Sanatorium, 15 went home at their own request, 6 selected cases were treated with Sanocrysin, 1 patient comes in monthly for pneumothorax refill.

Scarlet Fever. Two hundred and seventy-nine cases were admitted or transferred from Mount Gold Hospital.

Diphtheria. One hundred and thirty-four cases were admitted or transferred from Mount Gold Hospital. All returned home recovered.

Visits to Institutions, Homes, Schools, etc. Where several cases of infectious disease have occurred in any Institution or School, visits have been made, swabs taken and examined and suspected carriers isolated and treated.

Diphtheria immunisation has been systematically performed this year and for several previous years at an orphanage in the City with complete success. Patients have been visited in consultation with their medical attendant wherever assistance in diagnosis of infectious disease has been asked for by a medical practitioner in the City, and cases suffering from infectious diseases removed to hospital where necessary.

APPENDIX IV

Report on the Plymouth Tuberculosis Dispensaries.

By H. T. CHATFIELD, M.C., M.B., B.CH., D.P.H.

(Assistant Medical Officer of Health and Clinical Tuberculosis Officer.)

I have much pleasure in submitting my Sixth Annual Report on the work of the Tuberculosis Department of the Public Health Service of this City.

This Report is, incidentally, one which reviews the work of the past five years, as well as dealing with the activities of the department during 1930.

Supporting the remarks which follow, I invite your attention to Tables 9, 10, 10A, 11 and 11A, and to Charts "E" and "G."

What we have asked for. In my previous Reports for and since 1926 the need for the following has been emphasized :—

- (a) Institutional accommodation for intermediate and advanced cases of Pulmonary Tuberculosis in adult females.
- (b) Institutional accommodation for the treatment of children and adults suffering from Tuberculosis of the bones and joints.
- (c) An X-ray apparatus at the Main Tuberculosis Dispensary.
- (d) A Dental Sub-Department housed at the Main Tuberculosis Dispensary.
- (e) A Sub-Dispensary to serve the fast-growing Swilly district.

Our needs satisfied. The first need of the Department was met in 1927, when one ward (15 beds) at Swilly Hospital was placed at our disposal, and our full requirements were satisfied in August, 1928, when a second ward, increasing the number of beds for the treatment of Tuberculosis to 40, was allowed.

The second recommendation is receiving the hearty attention of the Public Health Committee, and with the Cripples' Hospital at Mount Gold, provision will, of course, also be made for those cases now receiving treatment at Udal Torre Sanatorium and Swilly (Tuberculosis) Hospital.

The third item is a *fait accompli*, the Right Worshipful the Mayor having declared the X-ray Department opened on the 19th December, 1928.

The Council has also adopted the fourth recommendation, and the Dental Sub-Department commenced its work in June, 1930.

The fifth item, that of the provision of an additional Sub-Dispensary at Swilly, is still before the Committee.

The provision of these additional "working tools" has transformed the Tuberculosis Dispensary. In the bad old days, less than five years ago, patients for X-ray had to be sent to Radiologists in Plymouth; and those needing dental treatment to dental surgeons scattered all over the City, and our waiting-lists for intermediate and advanced cases of Pulmonary Tuberculosis in adult females was invariably about 30. All this is changed, and the Dispensary is now a complete working unit. How this has been appreciated by the citizens of Plymouth will be seen in my Report.

Dispensary. Attendances:—

1926, 10,289 ; 1927, 12,003 ; 1928, 11,862 ; 1929, 13,931 ;
1930, 14,093.

It is seen that the attendances of patients at the Dispensaries has increased from 10,289 five years ago to 14,093 in 1930, which means that the general public is appreciating the Service provided; and, which is far better, using it.

There is no doubt that the Department is more "attractive" to patients when they can have their examination fully carried out, dental treatment provided, and institutional treatment arranged, all without delay; and from a Tuberculosis Officer's standpoint it is far more satisfactory when all necessities are at hand.

Of course, the attendance of patients has followed closer co-operation by general medical practitioners, who have sent new patients for an expression of my opinion as follows:—

1926, 489 ; 1927, 506 ; 1928, 552 ; 1929, 662 and 1930,
662.

For this co-operation I should like to express my sincere thanks. If every doubtful case were sent to the Dispensary, and treatment provided for those persons found to be tuberculous, the disease would gradually and effectively be brought into harness and eradicated from our midst.

Notifications. The closer co-operation between the medical practitioners and myself has improved this section of the work.

I should like just once more to repeat the remarks I made last year, namely :—

The chief objects of notification are :

(a) To prevent the spread of the disease. Notification brings the case to the notice of the Public Health Department, whose duty is then to co-operate with the practitioner in taking preventive measures.

It is obvious, therefore, that a change of residence to a new sanitary area means a new notification, and the medical man who must notify should be the practitioner in charge of the case.

(b) To put doctor and patient in touch with the schemes for treatment which exist throughout the country.

(c) To secure statistical information about the prevalence of the disease.

Notification should be made :

(a) When suggestive constitutional symptoms are present and sufficient corroborative evidence of Tuberculosis is available.

(b) When tubercle bacilli have been found in the sputum or elsewhere.

(c) In cases of hæmoptysis or pleural effusion where other symptoms and signs point to the existence of Tuberculosis.

(d) In acute general Tuberculosis, and Tuberculous Meningitis.

(e) In persistent chronic Adenitis, Arthritis or bone disease, where causes other than Tuberculosis can reasonably be excluded.

(f) In Tuberculous Dermatitis, and Lupus Vulgaris.

(g) In Tuberculosis of the abdomen, of the genito-urinary tract, or of other organs.

Medical practitioners can vitally assist prevention by :

(a) Securing the proper disposal of sputum. The easiest way of dealing with sputum or other infective discharge is by boiling or burning. If a cup is used it should contain disinfectant, and have a non-perforated, removable, or hinged cover.

(b) Seeing that an infective patient has a bedroom to himself, or if this is impossible, a bed to himself, separated by at least 5 feet from any other bed, in a well-ventilated room, and,

(c) Advising that an infective patient should not handle milk or other foodstuffs, or have the intimate care of young children.

Eighteen persons died from Tuberculosis during the year without previously having been notified to this Department, but the medical practitioners all had explanations which fully satisfied the enquiries made.

The new cases notified for the past five years are :—

1926, 559 ; 1927, 473 ; 1928, 436 ; 1929, 378 ; 1930, 334.

The jump in the figures for 1926, from 492 in 1925, I attribute to the great rise in unemployment in that year, followed by the inevitable consequences of poor and insufficient food, causing many dormant cases to be brought to a head ; who would, had the general conditions been more favourable, have remained in reasonably good health. Other than this year an appreciable drop in the figures is observed, giving a true index in the lessening of the disease.

Deaths from Tuberculosis :—

1926, 211 ; 1927, 213 ; 1928, 191 ; 1929, 190 ; 1930, 200.

There has been a decrease in the total number of deaths, but for the purposes of my report I can only deal with those persons who were actually on the books of the Dispensary, and they are as follows :—

1926, 187 ; 1927, 147 ; 1928, 113 ; 1929, 138 ; 1930, 136.

There are very many reasons why all cases do not come on our books, a few being :—

(a) Patients refusing to "give in" and refraining from calling in a doctor until they are practically dead.

(b) Plymouth residents who die from the disease while staying away from their homes, but whose deaths must be shewn in our figures. The Register-General notifies these cases to us.

(c) To an ever-decreasing number of patients who do not wish to attend a " Public Dispensary " like Beaumont House.

(d) To those patients who are sufficiently well-to-do to prefer to be treated by specialists in their own homes or who go away to private sanatoria at their own expense.

These and many others explain the difference in the figures given.

Institutions. A most welcome addition to the Department, so long awaited, is the introduction of the Plymouth City Hospital in the Public Health Service, for it is now possible to arrange for institutional accommodation for all those many cases which need the fullest investigation in an institution before a definite diagnosis can be arrived at. So much of this work cannot satisfactorily be completed at an Out-Patient Department (which the Tuberculosis Dispensary is), and the pressure on Sanatorium beds, together with the absence of a hospital for non-pulmonary cases, has made this problem very serious.

We are now working in the happiest possible manner with the City Hospital and our difficulties in this respect have disappeared.

The accommodation available for the treatment of Tuberculosis and observation beds, is, therefore :—

Didworthy Sanatorium (for early cases of Pulmonary Tuberculosis in adults and children of both sexes)	90 beds.
Udal Torre Sanatorium (a hospital-sanatorium for intermediate and advanced cases of Pulmonary Tuberculosis in adult males)	39 beds.
Swilly Hospital (two wards as a hospital-sanatorium for intermediate and advanced cases of Pulmonary Tuberculosis in female adults and children)	40 beds.
Other Institutions, as required for :—	
Non-Pulmonary Tuberculosis in adults and children of both sexes—usually	30 beds.

Cases suitable for concurrent training and treatment—usually	18 beds.
Plymouth City Hospital (for special cases needing investigation, etc., which can only be done in an institution, and for the treatment of special cases of Non-Pulmonary Tuberculosis) ..	10 beds.

giving a total of about 227 beds at our disposal (approximately one per thousand of the population).

The average daily bed occupation during the year was 214.4. As will be seen on reference to the Chart, after October there is a big reduction in patients in institutions, and I would explain that this was caused by two main reasons :—

- (a) emptying one ward (20 beds) at Swilly Hospital, on account of their being required for Scarlet Fever cases,
- (b) emptying the Girls' Block at Didworthy Sanatorium (10 beds), for it to be rebuilt,

and to a minor reason that there is always what we call a seasonal drop in the occupation of beds at Christmas-time. This fact will be seen demonstrated in the Chart for the past five years and is, of course, not common to Plymouth and quite understandable.

Didworthy Sanatorium. The popularity of this institution is marked, and patients for whom sanatorium treatment is necessary are anxious to be admitted there.

The completion of the Girls' Block will be a fine addition to an already excellent institution.

A report by the Resident Medical Officer follows this report.

Udal Torre Sanatorium. This institution continues its excellent work and the results of treatment are most gratifying.

A report by the Resident Medical Officer follows.

Swilly (Tuberculosis) Hospital. It would be unpleasant to visualise what we would have done without this hospital. It is impossible to reduce to words the wonderful work it is doing. It is popular, too, and the fact that it is so near the homes of its inmates is a great advantage, as the members of the patients' families can keep in touch with them.

Other Institutions.

Pulmonary Tuberculosis. We are grateful to the authorities of Hawkmoor Sanatorium, St. Michael's Home, and King George V Sanatorium for Sailors for the reception of our cases during the year.

Non-Pulmonary Tuberculosis. The local General Hospitals, Shropshire Surgical Hospital, Lord Mayor Treloar Cripples' Hospital, Royal National Orthopædic Hospital and Dame Hannah Rogers' Orthopædic Hospital have once again come to our aid by readily accepting our patients.

Treatment and Training Centres. There is no change here and the Papworth Village Settlement, at Cambridge, is still receiving our cases.

A few more patients have "colonised" and now live permanently at Papworth, but speaking generally it cannot be said that the average tuberculous patient has the "colony temperament."

Devon and Cornwall Ex-Service Colony, Efford. At the time of writing there are 91 souls living at the Colony, 15 are adult male colonists, 61 are children, and, of course, the balance are the wives of the colonists.

In addition to the above, 8 Trainees live in Plymouth and travel to Efford each day. In the majority of these cases the Tuberculosis Care and After-Care Committee defrays their travelling expenses.

It remains a pleasing fact that none of the children living at Efford are tuberculous, and that the general health of all persons residing there remains excellent. There is no doubt that the removal of these families from the City to Efford has had a highly beneficial effect of their health.

The County Medical Officer of the Devon County Council has been in consultation with our own Medical Officer of Health, and while the Trainees and their families remain under our care for tuberculosis services, the County Council has undertaken to provide the services of a Health Visitor to work the Colony. This is a decided improvement on the old arrangement and a step forward.

The Board of Management is still manfully plodding its uphill work of "making both ends meet." Orders for common household

goods—such as tables, chairs, step-ladders, as well as bedroom furniture, or, in fact, anything made of wood, are most urgently needed. Each succeeding year becomes more difficult, yet I feel convinced that if the citizens of Plymouth only realised what Efford does and what Efford means to so many families, orders would pour in.

Yet once more—I appeal for orders for carpentry.

Contacts.

1926, 827 ; 1927, 879 ; 1928, 803 ; 1929, 821 ; 1930, 841.

The system adopted to secure the attendance of contacts with tuberculous persons has proved successful.

From the above it is seen that no less than 4,171 "contacts" have been examined here during the past five years. Of this number 110 persons have been found to be definite cases of Tuberculosis, and given treatment, and 231 to be doubtfully tuberculous and kept under observation here until a definite diagnosis had been made.

I look on this as a most important branch of the work here—it is truly preventive.

Injections. Great success has attended this form of treatment in certain cases of non-Pulmonary Tuberculosis, and it is still actively followed.

Laryngeal Section. This work still remains under Dr. C. R. Crowther, our Laryngologist. I am indebted to him for a report on his work for the past year, together with a review of this section for the past five years, and it follows at the end of this.

Dental Treatment. This section of the work is one of our urgent needs met during the year, and the Dental Surgeon (Mr. Alan Maughan, M.C., L.D.S.) commenced duties in June, the Sub-Department serving the Tuberculosis and Maternity and Child Welfare Departments, and subsequently undertaking certain work for the Public Assistance Committee.

Although the Surgery has only been running six months, a surprising amount of work has been done, and as it is of particular interest I am detailing it :—

	<i>Tuberculous patients.</i>	<i>M. & C.W. patients.</i>	<i>Pub. Asstce. Ctee. cases.</i>
No. of patients granted Dental Treatment ..	177	249	33
No. of attendances of patients to Dental Surgery ..	546	515	57
Number of extractions—			
permanent	370	821	160
temporary	17	297	8
Anæsthetics—			
local	147	156	15
simple	7	10	—
prolonged	19	74	12
Fillings	255	71	4
Scalings	57	40	2
Dentures	50	36	6
Repairs	13	1	—
Other operations	112	73	14
Crowns	2	—	—

For the 92 dentures supplied, no less than 854 new teeth have been used, which excludes the very large number of dentures re-made, for which the old teeth were used a second time.

The cost of the Dental Sub-Department has not exceeded what would have been paid had the work been performed under the old system, and the convenience of having a Dental Surgeon on the premises when the clinics are held, and also to visit the Sanatoria regularly, is indescribable.

There were, of course, a number of patients who were having dental treatment when our own surgery was opened, and these are being completed by dental surgeons under the old scheme.

I am indebted to Mr. Maughan for a report on the Dental Sub-Department.

Surgical Appliances. The supply of these to our patients, as well as their repair, and sometimes, when the patient is a growing child, their alterations, is a very important branch of the work to which I have never previously drawn attention. During 1930 surgical appliances have been supplied and repairs and replacements effected to appliances in use to some twenty patients at a cost of £36 11s. 2d.

Domiciliary Treatment and Reports. The regulations of the Ministry of Health governing the submission of Domiciliary reports (Forms G.P. 36) for those insured patients receiving Domiciliary treatment from their Insurance practitioner are very clear and every assistance is given to the medical profession from this office. During 1930 no less than 248 forms were sent to doctors as the reports fell due, but only 179 reports were received. I know medical practitioners are very busy, and I hesitate to complain, yet I would very much appreciate it if they would give this section of the work closer attention. Its importance cannot sufficiently be emphasized, and I am sure that if my colleagues will appreciate this they will help me out by making sufficient effort to send reports which are due.

Anything that I can do to make matters easier for local doctors I shall be only too happy to undertake.

X-ray. We are accustomed to our X-ray Plant now, and it has proved of great general value to the Public Health Department as a whole during the year, for all the X-ray work of the City Hospital has been undertaken at the Tuberculosis Dispensary, in addition to our own work. Much evening work has been spent to accomplish this, and I am happy to state that satisfaction has been felt with the result, which has drawn sections of the Public Health Service even more closely.

The following is a summary of the examinations made during 1930 :—

For Tuberculosis Dispensary	..	..	..	1942
For Didworthy Sanatorium	..	..	..	64
For Udal Torre Sanatorium	..	..	..	55
For Swilly (Tuberculosis) Hospital	..	..	..	29
For Maternity and Child Welfare Department	..	..	..	224
For School Medical Department	..	..	..	58
For City Hospital	..	..	..	399
For Dental Sub-Department	..	..	..	7
For other Corporation Departments	..	..	..	34

giving a total of 2,812 examinations by X-ray.

Only a clinician can, of course, appreciate of what value the X-ray is in diagnostic work, and it would be waste of time to compare the figures of to-day with those of the years before the Plant was installed.

Bacteriological Work. This is carried out at the South Devon and East Cornwall Hospital still, and I find that reports reach me without any delay. From the Dispensary alone some 1,500 specimens of sputum, etc., are sent for examination annually, and during the past five years we have had 7,779 examinations made.

Housing. The housing of the tuberculous in new houses is, of necessity, a slow business, but I am grateful to the City Treasurer for his co-operation in this.

There is no doubt that the question is one for the local authority and not for the individual, and money spent in this direction would prove a good investment.

Recommendations made by this Department for Council houses have met with encouraging success and we now have :—

37 families occupying houses at Mount Gold and Prince Rock,
81 families similarly housed at Swilly, and,
7 at Stonehouse.

Clinics in Districts. A new Sub-Dispensary, to serve that fast-growing district, Swilly, would be a wise provision. At our disposal now are the Main Tuberculosis Dispensary at Beaumont House and the Sub-Dispensary at the Royal Albert Hospital, Devonport, and try as we will in making appointments, it is inevitable that some patients must wait a long time for their examination because of the large numbers attending.

To put it another way, no less than 11,703 patients attended Beaumont House during 1930, and 2,390 the small rooms at the Royal Albert Hospital Sub-Dispensary. Taking Beaumont House separately (for the Royal Albert Hospital Sub-Dispensary, though a crush, is workable), we find that 11,703 patients passed through one room. Sometimes there are as many as 40 patients waiting for medical examination at one session, most of the female patients bring a relation or friend, so we have between 60 and 70 people in the waiting-room at one time. Had we the third clinic, pressure would be eased at the Main Dispensary to a great extent and the patients themselves would find a clinic near their homes a great convenience.

The full title of our work should be "*The Prevention and Treatment of Tuberculosis,*" and it is to the first two words that I

would draw attention, for it is in the prevention of Tuberculosis that we are especially succeeding.

Children. We cannot do too much for little children. They are our care to-day and the men and women of to-morrow, and will mete out to the children of their day the treatment they themselves have received. Anyway, there is one season in the year when we hand the Dispensary over to their enjoyment, and their laughs, their cheers and happy faces repay us a thousandfold for the little we do to make their Christmas-tide happy. The Chairman of the Public Health Committee and his wife were good enough again to come to our party, and to them we pay our thanks.

The Electrical Engineer was particularly kind, and the Dispensary was a bower of coloured lights and decorations which were the admiration of our small guests. We are most grateful to all who ensured the success of the party.

After-Care Committee. This Committee, comprising four sub-committees—the Assistance, Employment and Training, Ways and Means, and Finance—is one of the Voluntary Committees which does not advertise its activities, but one to whom hundreds of patients give heartfelt thanks and without which the work of the Department would be much handicapped.

The Council does so much for the tuberculous persons, as I have endeavoured to shew in my report, yet there are so many ways in which patients need help to allow them to accept treatment under the Council's scheme. It is here that the Care Committee is invaluable :—

A married woman is sent to a Sanatorium. Who will arrange for the care of her children? *The Care Committee.*

Who will arrange for the care of the house while the mother is away? *The Care Committee will provide a home help.*

Who will provide clothes for patients to enable them to accept sanatorium treatment, and also replace worn-out clothes while they are in a Sanatorium? *The Care Committee.*

Who will help towards the rent while the wage-earner is away at a Sanatorium? *The Care Committee.*

Who will pay the fares so that patients in institutions many miles away may be visited by someone of their family ?

The Care Committee.

When the Tuberculosis Officer says that a patient must sleep by himself, who will provide the extra bed and bedding ?

The Care Committee.

There are many more instances, too numerous to enumerate, where the Care Committee earns grateful thanks from patients.

During the year this voluntary committee has helped no less than 124 cases at a cost of £315 0s. 0d.

The bulk of this money was raised by voluntary efforts of the Ways and Means Sub-Committee, but also very welcome grants have been made by the Royal Naval Benevolent Trust, the Plymouth Co-operative Society and certain Insurance Societies.

The Employment and Training Sub-Committee is finding difficulties almost unsurmountable, but they are proceeding quietly to obtain suitable work for all our patients well enough to undertake it.

Co-operation. To the other Departments of the Public Health Service, to the City Treasurer, the City Engineer and the City Electrical Engineer, as well as to all general medical practitioners I am grateful for help and the happy relations which we now enjoy.

To medical practitioners I again offer a most hearty welcome to *USE* the Dispensary.

During the past year I had 59 consultations with medical practitioners at the homes of patients, making a total of 274 consultations over the past five years.

Consultations other than at patients' homes numbered 2,827 for the same period, the number gradually growing from 430 in 1926 to 768 in 1930.

Visits by Tuberculosis Officers to the homes of patients—this is, visits to patients too ill to attend the Dispensary—have grown from 246 in 1926 to 444 in 1930, giving a total of 2,056 visits for the past five years.

These increases are important and they mean that general medical practitioners seek closer co-operation, and I am glad to meet them halfway. My hope is that the future years will draw us even closer in our work.

General. The stall at the Health Exhibition, 1930, placed at the disposal of the Tuberculosis Department, did credit to the patients. Work done by patients at Didworthy Sanatorium, the Devon and Cornwall Ex-Service Colony, Efford, and by patients in their own homes was exhibited thereon and made an extraordinarily good show. In addition, X-ray demonstrations were given at short intervals each day, X-ray films and Bacteriological slides were shewn and explained, and the whole proved of the greatest interest to the public.

We are grateful to Messrs. Watson and Sons, of London, for lending the portable X-ray apparatus free of all cost.

Conclusion. The work of the Department for the past five years has grown far more than was anticipated, and I have tried to show that the Council has been generous in meeting the needs of the tuberculous patients and to prove that the staff has eagerly grasped the opportunity to improve the lot of all those under the care of of the Department.

The success which has attended our efforts has meant much hard work and long hours, and I am grateful to the staff of the Dispensary for the ungrudging manner in which they have answered the many calls on their time and for their unstinted labour and loyalty.

**Report on the Laryngeal work of the Tuberculosis
Department during 1930.**

BY C. R. CROWTHER, M.D., B.CH.

The Laryngological Department is housed in a special room, and is well equipped with apparatus. For the cautery work current from the main is used, by means of a Schall Transformer.

During 1930 there were 292 consultations in the Department, and 51 patients were seen. In 28 of these the laryngeal disease was slight, in 19 severe. Of the slightly diseased some had a simple laryngeal catarrh, probably non-tuberculous, but secondary to the pulmonary infection. In others a mild laryngeal tuberculosis was seen; yet others had formerly been severely diseased, and appeared to be making progress toward cure. Severe cases included tuberculous granulomata, ulceration, and inflammatory swelling. Two were partly or wholly syphilitic.

Twenty-eight patients showed improvement, and of these six were cured, at least for the time. Permanent cure depends of course on cessation of the pulmonary disease. Twelve were stationary during the year: of these, one was a case of unilateral paralysis. Four became worse, and of these one died. Seven were seen only once.

Treatment of the slighter cases consists in the application of eucalyptol and menthol in liquid paraffin to the larynx: this is carried out by the patient himself by injection through the nostril, and is reinforced by sprays of zinc sulphate, or of collosol iodine or mercurochrome. In more severe cases silver nitrate (5-10 per cent) is applied after cocaine to the inflamed or excoriated part. Granuloma, local severe inflammation, and ulceration, are usually treated with the galvano-cautery.

The writer can confirm the claims made for this method of treatment. It is especially useful when swallowing is difficult by reason of pain; such pain is usually due to arytenoid inflammation, the cautery then gives a double advantage, by relieving the disease

and allowing nourishment. There is surprisingly little inflammatory reaction after this treatment ; in one case, when the larynx was so constricted by tuberculous inflammation and granulomata, that stridor was heard, the cautery was used after some hesitation ; but it was quickly followed by relief, and improvement has since been continuous. In this case the disease in the lungs was slight. When there is severe pulmonary disease, with pyrexia, it is unwise, as a rule, to use the cautery.

One patient was injected with lipiodol through the cricothyroid membrane, for radiography of the bronchial tree. Two patients were seen in connection with the Dental Clinic.

The laryngeal work has varied little during the last five years. Nine of the patients have been under treatment for the whole of that time, one for as many as ten years. It will thus be seen that in Pulmonary Tuberculosis, though a laryngeal complication certainly makes the prognosis more grave, still the pessimistic view, sometimes held, of its fatal effect, is not wholly justified.

Besides the consultations held at the Tuberculosis Dispensary visits were made, when urgently required, at the various municipal institutions, and at the houses of patients.

Report on the Dental Clinic at Beaumont House.

By Mr. ALAN MAUGHAN, M.C., L.D.S.

(Dental Surgeon.)

As this is the first report of the Dental Clinic at Beaumont House, it will not be out of place to give a general description of the Scheme.

Firstly, I would like to thank all the members of the Public Health Services with whom I have come in contact. It is usual to place this record of thanks at the end of a report, but it is placed at the beginning purposely to give it emphasis. When I was appointed I knew what the general scheme of work was to be ; but of local conditions I knew nothing, and it is owing to the help of the Staff and their kindness, gladly given, that the clinic so quickly got into working order.

Clinic. The clinic was opened in June, 1930, and was primarily intended for Tuberculous patients and Nursing and Expectant Mothers and children attending the various Welfare Centres. This was extended, and commencing in October patients recommended by the Medical Officer of the Public Assistance Committee have also been treated.

Surgery. The surgery is a tastefully decorated and well-appointed room with a very pleasant North aspect, and compares more than favourably with many dental surgeries of private practitioners. The equipment is up-to-date and sufficient for all treatment that usually comes within the purview of a dental surgeon.

In the waiting-room adjoining a supply of not too ancient periodicals is kept, and we have refused more than one offer of an aspidistra from patients, who, after one or two visits felt they had a personal interest in the place.

The Workroom. The workroom, in charge of a full-time Dental Mechanic, for the making of artificial dentures and other prosthetic appliances, is shared with the Dispenser, and as the work has increased so have we felt rather cramped for room, but not sufficiently to interfere with the work.

It is under my direct personal supervision, which is much more satisfactory than sending the work out to a mechanic to the profession, with its obvious delay, which is often the way in municipal dental clinics.

SUB-DEPARTMENTS.

To take the various departments in turn :—

Tuberculosis. The three Sanatoria are visited once each month. Patients from Swilly and Udal Torre, except in the case of bed patients requiring emergency treatment, are treated at Beaumont House ; but it has been found more convenient and economic to treat the Didworthy patients at that institution. A portable dental chair is retained at Didworthy, instruments and other equipment as necessary are taken out and one of the rooms in the Boys' Block is quickly turned into quite a good temporary Dental Surgery. The remainder of the patients are referred by the Tuberculosis Officer when any dental defects are discovered during their clinical examinations.

Generally speaking, I examine the mouths of all patients before their admission to Sanatorium or Hospital.

Maternity and Child Welfare. Each of the Medical Officers is entitled to refer up to six patients for certain sessions, which are arranged so that these patients do not attend on days when clinics for tuberculous patients are being held. If possible, treatment is commenced at the first visit and an estimate of the cost of the treatment sent to the Maternity and Child Welfare Department. The mother is interviewed and arrangements made for payment for dental treatment according to an arranged scale. Further appointments are made from Beaumont House ; but when dentures are required these are not supplied until the patient has paid her agreed proportion of the cost.

Instruction. Instruction is given during the visits on the importance of dental hygiene and the patients encouraged to ask questions. This seems to me the most satisfactory way of making dental knowledge digestible, and it is possible to remove many erroneous ideas concerning dental treatment for expectant mothers and young children.

A lecture on " Dental Treatment during Pregnancy " was given during the Midwives' Conference in October, 1930, which was illustrated by drawings and suitable models.

Public Assistance Committee. This Committee is making increasing use of the Clinic. The treatment is chiefly confined to the extraction of aching or septic teeth and the supply of dentures to edentulous patients suffering from digestive troubles. Arrangements are made when necessary for the treatment of mental cases at Ford House.

General. All the patients are *referred* for treatment, i.e., primarily they do not attend of their own free will, the majority may be described as not normal or below par, and as such are undoubtedly hypersensitive to pain. For these reasons anæsthetics, either local or general, are administered, for any operation which may possibly cause pain. Friday afternoons and Saturday mornings for Tuberculous patients and Maternity and Child Welfare respectively are reserved for those cases requiring a general anæsthetic, and one of the Medical Officer's of the Department concerned acts as anæsthetist.

Arrangements have been made for the admission of patients not suitable for treatment as out-patients to the City Hospital, and since this arrangement was made, two months ago, two patients have been so treated. I am grateful to the Medical Superintendent of the City Hospital for lessening my responsibility in such cases.

One of the Health Visitors has always been available if previous arrangements had been made, but owing to the specialised nature of my work this has not been too satisfactory, and a Dental Receptionist in attendance at all times is desirable.

The presence of the Ear, Nose and Throat Specialist and the free use of the X-ray apparatus in the building, when necessary, have on many occasions been made use of for the checking of a diagnosis, and their help has been greatly appreciated.

Briefly to sum up, any of the Medical Officers of the Tuberculosis or Maternity and Child Welfare Departments having a patient suffering from any form of dental trouble may refer the patient to me at the Dental Clinic, when immediate attention will be given to the case and the necessary treatment provided.

The Council is to be congratulated on having established this Clinic, and if I may judge from the complimentary remarks made by the various Medical Officers, it supplies a long-required want.

APPENDIX V

Report on Didworthy Sanatorium for the Year 1930.

By A. T. BETTINSON, M.R.C.S. (Eng.), L.R.C.P. (Lond.).

(Resident Medical Officer.)

General. Situated 700 feet above the sea level on the Southern edge of Dartmoor, yet protected from the severe weather characteristic of this part by the surrounding hills, is Didworthy Sanatorium—a little world to itself. Built on the hillside and with a porous subsoil, our natural drainage is excellent.

This Institution, belonging to the City of Plymouth, is the Sanatorium for early cases of Pulmonary Tuberculosis.

Although the majority of our patients are Plymothians we admit a few outside cases from the Counties of Devon and Cornwall.

Meteorological. The total rainfall registered here for 1930 was 62.43 inches, as compared with 62.81 inches in 1929.

The total number of wet days was 183, as compared with 150 in 1929. The heaviest rainfall occurred in January, when we had 10.04 inches of rain and 27 wet days. The driest month was July, when we had 1.29 inches of rain and only 5 wet days.

Farm and Estate. Many improvements have been carried out on the Farm during 1930. All boundary fences have been repaired and posts and wire placed where necessary for the safeguarding of the cattle.

A drinking trough has been built between the two top fields and a large permanent forage shed called in these parts "a Dutch Barn," has been built from the materials of the old stabling.

We have constructed a new three-stall stable, with a cart shed adjoining, in the field next to the Male Staff quarters. A new road giving easy access to this building has been made.

The Committee are at present considering the building of a set of modern cow-sheds in the same field.

This will be a big advance in the modernising of the Institution, as it will be remembered that the stabling was, and the existing cow-sheds are, within the precincts of the Sanatorium proper.

No serious cases of sickness have occurred in our cattle during the year. Considerable profitable business has been transacted with pigs and calves.

Our cows are given a Tuberculin test by the double intra-dermal and ophthalmic method every six months. Our milk production for the year amounted to 4,673 gallons. This represents about half of the amount required by the Sanatorium, the rest is supplied by contract from a local farmer. It is desirable that we should supply all the milk required from our own farm—at present we keep 6 South Devon cows—to do this we should need a herd of 12 to 14 head of cattle.

May I suggest that when our new cow-sheds are erected that they be large enough for this number.

Our pasturage is not extensive, and the question arises that it may not be sufficient for a herd of this size.

I have discussed this question with the Veterinary Surgeon, and he is of opinion that sufficient of the furze-covered "Downs," which is our land, could, with very little labour be reclaimed to meet our needs.

He strongly recommends that we should keep a herd of "Dexters" and not "South Devons." This breed, although rather small, is practically immune to Tuberculosis and would thrive on our rough pasture, where South Devons would starve. I feel this would be a sound business proposition.

It is to be hoped in the near future a modern type of piggery may be constructed, preferably in the same field as is proposed for the new cowsheds. The present piggery is too close to our lower water supply—it is the Sanatorium grounds and is in a state of decay. The Bacteriological examination of our milk and water

supplies have been excellent throughout the year. The following is a typical report :—

Water (all sources)—*B. coli* not present in 25 c.c.s.

Milk—*B. coli* not present in one-hundredth of a c.c. Total count 8,400 organisms per c.c.

Transport. Our only method of transport from the Station to Didworthy, a heart-breaking road $2\frac{1}{2}$ miles long, of steep gradients and hair-pin bends and with the worst possible surface, is a 1927 Morris lorry. This is practically worn out and would not pay to be completely overhauled. If possible, I recommend the purchase of a new lorry which would cost in the region of £280. If the Institution could deal direct with the factors, I am told that we should be allowed about £65 on our present lorry.

Institution. The number of beds available in the Sanatorium is 90.

We have, on the average, 30 women, 30 men and 30 children.

The average length of stay for each patient gradually increases, it is now between 12 and 15 months.

Didworthy is for, and only suitable for, stage 1 and early stage 2 cases. The total number of admissions for 1930 was 71. All were City of Plymouth cases. The total number of discharges was 77—75 being City of Plymouth cases, 1 from St. Germans' Guardians, and 1 from Devon County.

Immediate Results of Treatment—

46.2 per cent of the cases were discharged quiescent.

40.3 per cent of the cases were discharged "Improved."

11.9 per cent of the cases were discharged showing "No material improvement."

We had one death during the year.

Dental Treatment. The Dispensary Dental Surgeon gives at least one day per month to dental work at Didworthy.

Apart from extractions, much conservative work has been done this year. Where necessary, patients have been supplied with dentures.

Special forms of Treatment—

Sanocrysin. During the year 19 patients have received Sanocrysin treatment. This has necessitated in the region of 150 intravenous injections. The results, especially in some cases, have been very gratifying. There is no doubt in my mind that this form of treatment does reduce the number of tubercle bacilli in the sputum.

Tuberculin. Tuberculin in the form of Bovine P.T.O. has been used with great success in children with tuberculous glands, especially when used where necessary in conjunction with aspirating.

We also treated with success two cases of early Tuberculous Peritonitis.

Benzyl Cinnamic Esther (Dr. Jacobsen's Solution). I am at present trying the above preparation by giving it intra-muscularly. It is yet too early to speak of its results.

Collosal Calcium. On the assumption that cases of Tuberculosis suffer from a degree of calcium deficiency, which they cannot make up from the calcium salts contained in food, many cases (and all cases subject to hæmorrhage) are given a course of injections of Collosol Calcium. I believe, from my wide experience, that it does real good in hæmorrhage cases.

Collapse Therapy. It is to be regretted that we have no X-ray plant, and so it is thought to be unwise to undertake the work of initial collapse in the Sanatorium.

A small X-ray plant would turn ours into an A.I Institution—it is the missing link.

Occupational Therapy. The occupied mind is a contented mind—to give your patients something to think about besides Tuberculosis is sound medicine—much of the good accruing from fresh air, an ample diet and hygienic life is lost unless it is concomitant with contentment. Our patients are enthusiastic about the small industries they have built up. Our results of treatment show the good that is done. Our spirit is evident to anyone visiting. I propose to discuss our various activities under the following headings :—

- (a) The Rabbitry.
- (b) Printing and our magazine, the "Tatler" (under the title of "A Profitable Institution").

- (c) Handicraft Department.
- (d) Open-Air School.
- (e) The Gardens.

The Rabbitry. It will be remembered that the After-Care Committee granted us £50 with which to start a Rabbitry. Of this money we only drew £25 4s. 0d. and have since repaid 18 guineas and hope shortly to repay the remaining 6 guineas. This will clear us of our main obligation, after which we hope to be able to forge ahead, buy new stock, and increase the profits. We have had many pelts made up into gloves, neck-wraps and mocassin bedroom slippers, which are sold at a good profit—it is with this money that we are repaying our debt to the After-Care Committee and maintaining the Rabbitry.

We have been wonderfully successful at the Local Shows during the year. It is a very rare occurrence for us to fail to bring back a prize from the shows.

At the present time we have only two varieties of rabbits—Chinchilla and Angora—but we hope in the near future, when the season is at hand, to re-stock the rabbitry with “Blue Beverens.”

The Rabbitry was in the first instance designed and constructed by patients, and since its inception has been managed and run entirely by the patients, merely being supervised by a member of the staff.

We are hoping that the coming year will prove that the Rabbitry is not merely a success financially, but a hobby and instruction to the patients generally.

A Profitable Institution. “Didworthy Sanatorium is to be congratulated on the latest addition to its activities—a monthly magazine. It bears the title ‘Didworthy Tatler’ and is notable as a complete production by the Institution.”

“Three cheers for the gallant patients at our Sanatorium, who have produced ‘The Didworthy Tatler.’ This rollicking journal has been printed and published at Didworthy, and it reflects the greatest possible credit on all concerned.”

These two laudatory extracts from the local press—the first in

the leader columns of "The Western Morning News" and the second in "Peter Prior's Gossip"—acclaimed the first issue of our Sanatorium Magazine, which is now regarded as one of Didworthy's "industries."

The "Tatler" was first conceived in June, 1929, when the patients themselves proposed its institution. At the direction of the R.M.O., they formed a Committee among themselves, and investigated the possibility of producing a magazine, together with the cost of such materials as were necessary for its production.

Following closely upon this, the Health Committee generously provided an Adana hand press, complete with accessories and type. Contributions were then solicited, and the response from the patients was splendid. The Writing Room was set aside as a Printing Room, and the magazine committee set to work with a ready zeal.

Thus "The Didworthy Tatler" passed from the realms of possibility to those of actuality.

The first issue, published in November, 1929, was a distinct success. Some 90 copies were sold at 3*d.* each, and praise was evoked from many quarters.

The ready welcome accorded to this initial issue made it apparent that the magazine could be a profitable proposition, not only from a monetary point of view, but also as far as the patients were concerned. Here was something to interest them; something to distract their minds from morbid and introspective thoughts something on which they could be well employed.

Accordingly, such patients as were unfit for the work provided in the workshops or on the gardens, were definitely graded to the lighter work in the printing room. One of their number was placed in charge as Editor, and thus the printing became established on an organised basis, supervised and controlled by the R.M.O.

Six numbers have been published since the first issue, and each has upheld the same high standard with which the first was credited. The approximate circulation is now 130 copies at every publication.

In addition to being engaged in the production of "The Tatler," the printing staff has supplied advertisement cards, receipt slips, etc., for use in the Rabbitry and Workshops, as well as programmes of

Christmas festivities and concerts. Generally, from three to five patients are engaged on all day work in the Printing Room.

Printing is an altogether useful and profitable institution. We trust it has come to stay, and that its success in future ventures may be even more distinct and apparent than in the past.

I should like to record my appreciation of Mr. Evans, the patient who has been Editor of "The Tatler" since April. We are hoping when he leaves here that he will take up a journalistic career.

Handicraft Department. Our Handicrafts Department was inaugurated on its present basis in April, 1929, slowly but surely under the unflagging enthusiasm of our Instructor, Mr. Cox—himself an ex-patient—it is becoming one of the most important departments of the Institution. Conducted under Medical Supervision our workshops are of great therapeutic value.

Throughout the past year the activities of the workshop have been largely concentrated on the better equipment of the workshops. New individual benches have displaced the original multi-benches, racks and cupboards have been made for the tools, shelves fixed for the finished goods, the store fitted out for ironmongery and a shed built for the circular-saw, the paint-shop has been wired for electric light, hand railing has been fixed around the stairs, etc., and the patients have built and decorated a fine office for the department. They have also erected a Hut as a reading room for themselves. The tables, deck-chairs, dressing-tables, etc., have been kept in repair and much old furniture reconditioned. They made the joinery (doors, etc.) for the new garage, and carried out alterations and decorations to the Instructor's living quarters. Repairs have been executed to the equipment on the Putting Green, and some useful work executed for the Engineering Department, whilst the Rabbitry and Printing Room have received valuable assistance.

The Boys have done 3,295 working hours.

The Men have done 6,976½ working hours.

Accommodation. I have spoken elsewhere of the necessity of a separate shop for the boys. That is of paramount importance. The present wood-working shop measures 20 feet by 12 feet, giving a floor space of 36 square feet per boy, of this some space is taken by the lathe. The Board of Education recommends that 50 square feet per pupil be provided as a minimum. Where the shop is used for

productive purposes, 100 square feet per man is required. It is thus evident that we are much overcrowded.

Two other things are necessary :—

- (1) A small metal-working shop.
- (2) Storage for the finished goods.

The whole activities being under the supervision of one man, it is very desirable that they should be carried on under one roof, and I suggest that the material on the premises be used to extend the workshop in continuation with the existing paint-shop.

We have practically all the tools necessary to equip this proposed building.

Alternatively a new shop could be built elsewhere and an old motor-car engine used to drive the machinery.

We have acquired a good and adequate stock of tools and materials, with the provision of separate rooms in one building for various activities the abuse of these valuable articles would be reduced to a minimum.

The good effect of a well-ordered shop is cumulative.

Psychological. The psychological benefits of an absorbing interest are undoubted.

The man who can lose himself in a suitable hobby finds a relaxation which is as beneficial as a change of scene. It means the transferring of the outlook and emotions from one sphere to another, for that reason we endeavour to provide the men with just that type of work which they most desire, and it is only the limited accommodation which ties us to one or two activities.

We find that the majority of the men settle down to the work provided, with great zeal, and the spirit existing in the workshop is admirable.

If, in addition to restoring a patient's health, we can induce him to take an interest in some healthy hobby suitable to pursuit at home, we are not only giving him back a priceless possession but providing him with something useful and productive.

The Boys. With the boys we have a slightly different outlook

to quote Rousseau : “ If instead of chaining a child to his books I occupy him in a workshop, his hands labour to the profit of his spirit.”

It is essential that the children should receive practical instruction. To feel, to touch things—that sense is the final criterion of physical reality and this sense is exploited more than any other in the practical room. When the boy completes a piece of work, he is largely his own judge, either the joint fits or it does not, the job fulfils its purpose or it does not. He needs no telling.

It has been said that “ The changes in industrial and commercial organisation all the world over is demanding that those who are engaged in it, in no matter what sphere, must be thoroughly trained in mind, hand and eye.” Having found it necessary to remove these boys temporarily from home influences, we must do our best to see that they lack no training which is essential to their future life.

The instincts which the Handicrafts Teacher makes most use of are developed at the following ages :—

- (1) Curiosity and imitation—6 to 12 years.
- (2) Manual dexterity and constructiveness—13 to 15 years.

The development of the motor centres of the hand is not great after the age of fifteen. It is therefore essential that the boys should receive handicrafts training before this age if they are to obtain full benefit from later training. Most important, the adolescent boy must be given some suitable outlet for his incipient creative instinct.

We endeavour to teach the boys to work methodically, that they may achieve their aims with the least physical effort, whilst the system of allowing them to perform group projects provides opportunity for those who have ability for leadership and promotes the team spirit.

A few well-arranged facts intelligently applied are worth a wealth of academical knowledge.

I would like to emphasize the necessity for the provision of separate accommodation for the boys. Their requirements clash with those of the men, there is no suitable place for them to do the all-important drawing. The benches are too big for them and some of the tools are too heavy.

The Open-Air School. "The Greeks taught in the open air—Why don't we?"

Why not build all schools on the open-air principle in future and not limit the undoubted benefits to the tuberculous and ailing child only?

Didworthy could not be the fine Institution it is without its "Open Air School."

We do our best to see that the child's education is not neglected during its stay for treatment here.

The average number of children attending the Open-Air School at Didworthy for the year ending 1930 was 26.

The number of attendances made being 11,874 out of a possible 13,346, making an average of 88.9 per cent.

The ages of children vary from 5 years to 14 years.

The older boys have taken great interest in their work and have given much help in their class.

The children have made much progress in Handwork during 1930, especially in cane-basket work. Many articles made by the children in raffia and cane were exhibited at the Health Exhibition and were quickly sold.

During the Christmas season the children took great pride in decorating their Schoolroom to represent Autumn Tints, and many happy hours were spent in this room.

The heating apparatus which has been installed in the Schoolroom this season greatly adds to the comfort and welfare of the children and those in charge.

Didworthy at Christmas-time was indeed a Fairyland to the children, especially the dining-room, which contained a Christmas tree filled with toys and illuminated with coloured fairy lights.

The little ones will certainly not forget the wonders of Christmas and their happy time at Didworthy.

The Gardens. The grounds of the Institution—once an uncared-for waste—each year becomes more like a park.

In no small way are the patients to be thanked for this, and it is gratifying to relate that several patients after leaving here have been able to get work as gardeners and in nurseries.

New Structures and Decorations completed during 1930. This year we have constructed ourselves a Staff garage, capable of holding four cars, and the new stables, of which I have made mention in the section on the farm. Also we have constructed a large reservoir which now safeguards us against shortage of water in the summer. We have completely re-decorated the following :—

1. New block for boys.
2. King Edward VII Pavilion.
3. Men's Wing.

Retrospect. I have had the honour of being your servant for the past five years, and it is with great pride that I look back and view the progress that has been made since I took office. Perfection will never be attained, but the progress of the past stimulates one's endeavours in the future. I think we may justly say there is no happier "Home" than ours. May we always have with us that human touch that makes us one large family. Our patients' committees are real and living things, and from patients' suggestions many of our great improvements have been born. In conclusion, may I thank the Committee, the Matron, and *all* members of the Staff for their help and guidance during the past and present. May we always work as one team for the help of our fellow beings.

APPENDIX VI

Report on Udal Torre Sanatorium for the Year 1930.

BY D. F. JOHNSTONE, M.R.C.S. (Eng.), L.R.C.P. (Lond.),
D.P.H. (Lond.).

(Resident Medical Officer.)

As I only commenced duty as Resident Medical Officer of the Sanatorium in December, 1930, I experience a certain amount of difficulty in making a Report, not only to cover the past year, but to include a review on the work of the Sanatorium for the last five years.

The Sanatorium is situated at Yelverton, about nine miles from Plymouth, on open moorland about 630 feet above sea level. It is in an excellent position for the treatment of tuberculous patients, as they have the full benefit of the pure moorland air at all times.

Originally it was a private dwelling-house and faces east, and the grounds around the house are used by patients for exercise and playing such games as the weather permits.

The house has been adapted as a Sanatorium by altering and enlarging the windows ; but it will nevertheless always remain a dwelling-house and will never be suitable for a Sanatorium proper.

In addition to the main building, there are 12 revolving shelters in the grounds, in which the more convalescent of the patients are housed. These huts are in great demand-with the patients, who make them as home-like as possible, and greatly appreciate the extra privacy which they ensure. All these huts are provided with electric bell pushes which communicate with the main building, so that in the event of an emergency occurring, instant attention can be obtained day or night. At the time of writing the bells are being rewired, as the dampness and dripping from the trees has rotted the insulation beyond repair and short circuits were continually occurring. An improved type of weather resisting cable is now being

used, as it is essential that these bells should always be in constant working order.

Lighting of the Sanatorium is carried out by means of acetylene gas, which on the whole has been fairly satisfactory. Heating is provided for by coal fires, and there is always a constant and plentiful supply of hot water.

Adequate fire-fighting appliances have been provided and fire drill is held at intervals. Instruction is given by the Fire Inspector of the City of Plymouth, and those patients who are well enough take their place, with the Staff, during these drills.

The Sanatorium has accommodation for 39 adult male patients in the intermediate and advanced stages of Pulmonary Tuberculosis. Twenty-seven of these are housed in the main building and twelve in the revolving shelters alluded to previously.

As most of the cases are fairly advanced treatment is confined to raising their general condition to the highest level possible by means of plenty of good food, graduated exercises in the open air, suitable rest and medicinal measures when necessary. Occupational therapy is not practised, as there are no workshops provided, but light work is undertaken by all patients who are fit, and includes the keeping of wards, and huts, and grounds in a tidy condition and light work in the garden. In addition to this, minor repairs, such as refitting broken glass windows, mending electric wires, etc., are done by the patients, and I have always found them very glad to assist in any work of this kind.

Sanocrysin treatment is being given to selected cases, and of these so far the results are encouraging.

It is surprising how much patients improve on this regime. Weight is gained, cough and expectoration are diminished, and a general feeling of well-being is produced. Those patients who do really well are transferred to Didworthy to finish off their treatment, and the work which they are able to do there in the workshops fits them for a more active occupation when they are finally discharged.

Dental treatment is provided for all patients requiring it, and the Dental Surgeon visits once a month and makes his inspection. Those who are well enough receive treatment at Beaumont House, and any who are too ill to go to Plymouth receive dental treatment in the Sanatorium. This is a most important part of the work, as

patients who are dentally unfit cannot obtain full value from the food provided, apart from the impaired general state of health which occurs from bad teeth, and which tends to lower the natural resistance of the body to disease.

A throat specialist is always available for those suffering from laryngeal tuberculosis.

X-ray examinations, when required, are undertaken at Beaumont House.

There were sixty-two admissions during the year and sixty-one patients discharged, and the average bed-state was 37.6.

The results of treatment have been encouraging and the following paragraph gives details of the cases discharged :—

- 1, i.e. 2.5 per cent of the patients were discharged as quiescent.
- 33, i.e. 55.9 per cent of the patients improved.
- 10, i.e. 16 per cent showed no material improvement.
- 17, i.e. 25.6 per cent died in the Institution.

Eighteen patients, nine of whom died, were in the Sanatorium less than 3 months. Seventeen patients, four of whom died, remained in the Sanatorium between 3–6 months. Twenty patients, three of whom died, remained in the Sanatorium 6–12 months. Six patients, one of whom died, remained in the Sanatorium for a period longer than 12 months.

I find that 9 patients who died within 3 months of admission were very ill indeed when they came in.

On the whole, the year's figures may be viewed with gratification.

Comparing them with the figures for 1929, I find that included in the 56 discharges during the year, 25, or 44.8 per cent, were deaths.

Adequate recreation is just as important in the treatment of Pulmonary Tuberculosis as other therapeutic measures, as it tends to keep the patients' minds from dwelling on their own misfortunes, and makes their general attitude towards life much happier. With that end in view, indoor and outdoor recreation has been provided. Billiards is, of course, the favourite indoor game, and there is always quite a good team to be found among the patients. A Challenge

Cup, fought for annually between Didworthy and ourselves was lost to that Institution at the 1930 tournament, but we hope to regain it in 1931.

Whist Drives are very popular and are held frequently in the Winter months.

Croquet and Putting are played when the weather is suitable, and the Challenge Cups for Croquet and Putting are played for annually and remain intra-Sanatorium trophies.

The Wireless Set and Gramophone are in daily use and both are much appreciated by the patients. Magazines and daily papers are provided and there is a small library in charge of one of the patients, as is also the Canteen, where tobacco, cigarettes and other useful articles are sold, the profit from these articles going to the Sports fund.

The staff and patients again helped in the sale of emblems locally in aid of the funds for the Care and After-Care Committee. Several pounds were raised, and all who were well enough proved willing helpers and good sellers.

Most of the patients were granted leave during the Christmas holiday, but those who were too ill to go made the best of our excellent Xmas fare and thoroughly enjoyed themselves.

The bran tub party which took place after Xmas, when all the patients had returned, was a great success and was enjoyed by patients, visitors and staff alike. I wish to express my thanks to Mr. Alderman H. M. Medland, Councillor Mrs. C. H. Daymond, the Chairman and Vice-Chairman of the Public Health Committee, respectively, the Matron and Staff for all they did to make it a happy day for the patients.

Religious services are held every Sunday after tea and are well attended.

I wish to express my thanks to the local clergy and residents of Yelverton for their ever-ready help and kindly feeling towards us.

Finally I wish to express my keen appreciation of the work done by the Matron, Nursing Staff, Orderlies, Cook, and Kitchen Staff for the benefit of the patients and Sanatorium generally, and without whose co-operation the carrying on of an Institution like this would be impossible.

APPENDIX VII

Venereal Diseases Treatment Centre.

BY E. J. HYNES, F.R.C.S. (Edin.), D.P.H. (Lond.).

(Assistant Medical Officer.)

The V.D. Treatment Centre was opened in March, 1919, and provides treatment for the City of Plymouth and Devon and Cornwall County Councils.

The County Councils pay travelling expenses to the nearest Treatment Centre of poor patients requiring treatment, and all treatment is, of course, free, so no sufferer from Venereal Disease should be without treatment owing to lack of means.

Clinics are held at the Centre as follows :—

MALES.	FEMALES.
Mondays .. 6 to 8 p.m.	Tuesdays .. 6.30 to 8 p.m.
Tuesdays .. 10 to 12 noon.	(Lady Doctor in attendance)
Wednesdays 3 to 5 p.m.	Wednesdays 6 to 8 p.m.
Thursdays.. 6 to 8 p.m.	Thursdays.. 10 to 12 noon.
Fridays .. 10 to 12 noon.	Saturdays.. 3 to 5 p.m.
(Children)	
Saturdays .. 6 to 8 p.m.	

Patients are frequently seen at other times.

The Centre is also open for Irrigations and treatment under supervision as under :—

MALES.	FEMALES.
Mondays .. 9.30 to 12 noon.	Mondays .. 3 to 3.30 p.m.
6 to 8 p.m.	Tuesdays .. 6.15 to 8 p.m.

	MALES.	FEMALES.
Tuesdays ..	9.30 to 12 noon. 5.30 to 6.15 p.m.	Wednesdays 6 to 8 p.m. Thursdays 10 to 12 noon.
Wednesdays	9.30 to 12 noon. 3 to 5 p.m.	Fridays .. 3 to 3.30 p.m. Saturdays 3 to 5 p.m.
Thursdays..	6 to 8 p.m.	
Fridays ..	9.30 to 12 noon. 5.30 to 7 p.m.	
Saturdays ..	9.30 to 12 noon. 6 to 8 p.m.	

There is also an In-Patient Department reserved for acute and infectious cases. It contains five beds for males, and five for females; additional cots are provided for children suffering from Venereal Disease and babies with Ophthalmia Neonatorum.

There is close co-ordination between the Treatment Centre and the Maternity and Child Welfare Department, one of the Lady Doctors from that Department holds a V.D. Clinic on Tuesday evenings.

An effort is being made to obtain Blood Tests of pregnant women attending the ante-natal centre, to enable us to give anti-Syphilitic treatment where required, and thereby attack the problem of the Congenital Syphilitic child at the earliest possible stage.

The gynæcologist, who holds ante-natal clinics at the South Devon and East Cornwall Hospital, Plymouth, and the Alexandra Nursing Home at Devonport, sends patients to the Clinic for anti-Syphilitic treatment. These women are given intensive treatment during pregnancy. The result, if treatment is commenced early enough, is healthy babies instead of stillborn or diseased children. If the blood of every pregnant woman could be tested at the ante-natal clinics or elsewhere, as a routine, it would save the lives of many babies, and prevent many a child starting life with the terrible handicap of Congenital Syphilis.

Attendances. Since the Clinic opened in 1919, 10,806 persons have attended for examination and treatment where required.

The following table shows the number of patients treated during the past two years, with the results of treatment :—

	Syphilis.		Suffering from— Gonorrhœa. Other Diseases.				Total.	
	1929.	1930.	1929.	1930.	1929.	1930.	1929.	1930.
Patients dealt with for the first time (i.e. new patients) ...	163	145	284	252	329	306	776	703
<i>Results of Treatment—</i>								
1. Patients discharged—treatment completed ...	69	71	175	93	273	262	517	426
2. Transferred to other centres	71	66	36	63	—	—	107	129
3. Patients who ceased attendance—								
(a) before completion of first course of treatment ...	79	31	71	37	—	—	150	68
(b) after one or more courses but before completion of treatment ...	31	24	—	—	—	—	31	24
(c) after completion of treatment, but before final tests of cure had been completed ...	41	38	37	46	—	—	78	84
4. Remaining under treatment	250	183	54	84	25	45	329	314
5. Total Out-Patient attendances ...	4271	3768	10985	10226	997	1296	16253	15290
6. Number of In-Patient days of treatment ...	430	387	1111	881	67	274	1608	1542

It will be seen from the above table that the numbers of patients have varied very little from those of last year. They are slightly less. Syphilis (18 less), Gonorrhœa (32 less), other Diseases (23 less). One of the main difficulties which every V.D. Centre has to contend with is to make patients attend until cured. As soon as they feel quite well and all visible signs, or at any rate all painful and uncomfortable symptoms have ceased, many of them come no more. To try and prevent this, every patient has it impressed upon him how extremely important it is to attend until a "cure" has been pronounced by the Medical Officer. On the whole, patients do certainly attend better than they did formerly, especially those suffering from Syphilis, many of whom come regularly for examination and observation Blood Tests, for many years.

Syphilis. The figures of NEW CASES of Syphilis remain satisfactorily low. Of the 145 cases attending during the year, 48 con-

tracted the disease within a period of a year ; that is, they were in an acute and most of them in an infectious condition :—

Of these 19 were primary cases, i.e. cases in the first stage (16 males, 3 females) of the disease.

27 were secondary cases (16 males, 11 females).

2 were babies under one year of age suffering from Congenital Syphilis.

Most of the female cases do not come for treatment until they have arrived at the secondary stage, as before this stage has been reached there is often no sign of the disease obvious to the patient.

Of the above-mentioned cases, only 18 contracted the disease in Plymouth (by a strange coincidence exactly the same number were infected in Plymouth in 1929). For a city of the size of Plymouth with its large floating population, the number is remarkably low.

In the majority of cases we have been able to trace the infecting agent, and in many cases have been able to get him or her under treatment, if not being treated elsewhere.

Congenital Syphilis. There were 22 new cases of Congenital Syphilis during the year :—

<i>Under 1 year.</i>	<i>5 to 10 years.</i>	<i>10 to 20 years.</i>	<i>20 years and over.</i>
2	7	6	7

Gonorrhœa. The number of cases of Gonorrhœa remains fairly constant from year to year. The average for the past five years being 296.

In 1930 there were 252 (210 males and 42 females), the lowest number since 1925. As this disease is often treated very lightly by ignorant members of the general public, often causes little or no discomfort after the acute stage is over, and may remain infectious for years (especially in women) if untreated or improperly treated, one cannot hope for much reduction in its incidence.

On enquiry from the male patients the following information as to the source of infection was obtained. The figures are of interest :—

87 contracted the disease from prostitutes, i.e. from women who accepted money payment.

78 from amateurs, i.e. friends, casual acquaintances and "respectable married women."

24 from "wives," a figure which must be accepted with reservation.

21 from other sources.

Of the above cases, 121 contracted the disease in Plymouth:—

69 were indebted to prostitutes.

38 to Amateurs.

20 to Wives.

3 other sources.

Of the 37 Female patients who attended from Plymouth: 18 were married women, 15 single, 1 a widow, 3 children under age of 12.

Ophthalmia Neonatorum (Gonorrhæal). Eight babies with Ophthalmia were treated during the year (6 from Plymouth and 2 from Cornwall). Six of these were treated as In-patients. This is an improvement on last year (14 cases).

APPENDIX VIII

School Medical Service of Plymouth.

By A. T. NANKIVELL M.D., M.R.C.P., D.P.H.

And J. W. E. COLE, M.A., M.B., D.P.H.

(Assistant Medical Officer.)

Average number on rolls of Elementary Schools, including Central Schools, during 1930	29,890
Average Attendance	25,923

Changes in Staff of School Medical Service. Dr. Raymond resigned his appointment as an Assistant School Medical Officer on September 30th, but continues to carry out his duties pending the appointment of a successor.

Dr. Hirst resigned her appointment as an Assistant School Medical Officer on December 31st.

Dr. C. R. Crowther started duty as Aural Specialist on September 16th, 1930.

Nurse Dawkins resigned on November 30th. Nurse Fletcher, who for ten years has been working at Mount Tamar Open-Air School, applied for the vacancy and started her new duties on December 1st, 1930.

Nurse Bowden was appointed to the Mount Tamar Open-Air School and started duty on December 1st, 1930.

Co-ordination with other Health Services. The Medical Officer of Health of the City of Plymouth is also the School Medical Officer. This ensures the closest co-operation between the School Medical Service and all the varied activities of the Public Health Department as a whole.

Infant Welfare. Cards of children who have been under the care of this department are forwarded to the School Medical Officer in order that items of importance may be copied on to the school medical card.

A few children have, at the request of the School Medical Officer, received Violet Ray treatment at the Welfare Clinic, while children under school age have, at the request of the Welfare Officer, been treated at the School Orthopædic Clinic.

Venereal Department. Children discovered by the School Medical Officers to be suspected of suffering from venereal disease are referred to the Venereal Disease Office at the hospital. This doctor keeps the School Medical Officer informed of all cases of venereal disease (congenital and acquired) discovered by him in school children. Records of all such are filed by the School Medical Officer, and, in the case of children attending any of the Special Schools, the prescribed treatment is carried out by the School Nurse.

Tuberculosis. Weekly reports concerning all school children attending the Tuberculosis Clinics are forwarded to the School Medical Officer. Many of the Tuberculosis Officer's recommendations are carried out through the School Medical Services, e.g., transfer to Open-Air Schools, operation for tonsils and adenoids, the supply and repair of splints to cases of surgical tuberculosis, and dental treatment. Conversely the School Medical Officer makes full use of the X-ray apparatus installed at the Tuberculosis Clinic for the photography of cases of bone injuries attending the School Clinics.

Public Health Department. The arrangements with this department are to secure joint action in the investigation and control of Infectious disease.

The Medical Officer of Health is kept continuously informed of all cases of notified infectious disease occurring in school children, and of all home contacts of notified infectious disease. Head Teachers and the School Attendance Officers are immediately directed to exclude all such, until notice is given that they may return to school.

All diphtheria contacts are notified. They are visited and swabs taken by the School Nurses.

Schools are disinfected by the staff of the Medical Officer of Health in accordance with his directions.

School Hygiene. The subject of provision of dining-room accommodation is of special importance in Secondary Schools and the Central Elementary Schools.

Good arrangements are those existing at Sutton Secondary School. The dining-room is used for no other purpose. An attendant, paid by the City Council, looks after the room, lays the tables, warms the boys' food, and washes up. Cloths, cutlery and crockery are supplied by the Corporation. A master is present during the whole of the meal. Each table has its own captain, and there is a special table for prefects. The charge to each boy is $\frac{1}{2}d.$ a day (whether he wishes his meal warmed or not). The boys are encouraged to bring proper meals and not sandwich snacks. Hot cocoa or hot milk may be had at the price of a penny but the demand is small. The meal is a well-ordered parade of educational value.

At other schools the arrangements are of the same type, but sometimes less thoroughly organised. Sometimes one is informed that meals can be had from the adjoining Cookery Centre at the price of about $6d.$, but further information direct from the Cookery Mistress is often to the effect that the demand for such is practically nil. Sometimes a master "starts the meal" and then disappears.

A good many children visit neighbouring fried fish shops or buy pasties.

The arrangements in the Special Schools, where complete meals are provided by the City and paid for by the parents according to a fixed scale, come under a different category.

Medical Inspection.

The regular inspection of entrants, intermediates and leavers has been carried out in accordance with the requirements of the Board of Education. As in previous years the examinations took place on the school premises, with the exception of Grey Coat School and St. Andrew's (two departments).

Numerical returns of children to be examined are obtained from Head Teachers, who are subsequently informed of the date of the visit of the Medical Inspector. Certain entries, including height and weight, are made on each card by the Head Teacher, who informs each individual parent of the intended examination and invites their presence. These preliminaries involve a considerable amount of clerical labour. Usually about 25 children are inspected at a morning session and 20 in the afternoon.

Findings of Medical Inspection. (a) *Malnutrition.* There is a certain amount of confusion when children are classified under such headings as Malnutrition, Anæmia, Pre-tuberculosis, etc. Confining the term to those who appear to be suffering from lack of food apart from disease, the condition is not common in Plymouth.

During the past year, apart from the routine examinations, a special effort was made to discover the existence of such children. The matter is referred to later in this report.

(b) *Uncleanliness.* See Section on Nurses' work.

(c) *Minor Ailments.* There is about 15 per cent decrease on the figures recorded last year. These figures refer to the children brought to the Medical Officer for examination. The difference is accounted for by the greater care exercised in not unnecessarily bringing trivial cases before the Medical Officer. The actual attendance figures at the Minor Ailment Clinics shows an increase of about 2 per cent.

(d) *Eye Conditions.* There is increase in the number recorded as suffering from visual defect but not requiring treatment. These are children who have been treated already.

Other figures call for no special comment.

Infectious Diseases. The infectious diseases Scarlet Fever, Diphtheria, Measles, and Chicken-Pox are always present in a town of any size. In some years the number infected is smaller, in others it is greater. After a quiet period extending over three years, the figures for Scarlet Fever during the past year have, comparatively, more than doubled themselves. Fortunately the type of case has been very mild.

As commonly happens, the Diphtheria figures have risen also, but not to anything like the same extent. The Chicken-pox figures have been smaller than usual. The cases have been distributed through a large number of schools, and in no instance was it necessary to close a school. In the height of the epidemic the attack rate in the worst-infected school was never greater than 3 per cent of the total attendance.

During the last three months of the year, when the epidemic was at its worst, the following schools remained entirely free: Castle Street Infants; Charles Senior Mixed and Junior Mixed;

Cornwall Street Infants ; Frederick Street Boys ; High Street Girls ; Holy Cross Girls ; Hyde Park Boys ; Laira Green Senior Mixed ; Paradise Road Senior Boys and Junior Mixed ; Prince Rock Boys ; St. Andrews Junior Boys ; St. Budeaux Mixed ; St. George's Junior Mixed and Infants ; St. James-the-Less Senior Mixed and Junior Mixed ; St. John's Boys and Infants ; St. Joseph's Junior Mixed ; Treville Street Senior Boys ; Trinity Junior Mixed and Infants ; Victoria Road Senior Mixed.

The precautions taken to prevent the spread of infectious disease may be summarised as follows :—

Isolation of the patient.

Exclusion from school of the contacts in accordance with the Board of Education Memorandum on the subject.

In the case of Diphtheria, swabbing of all family contacts and, when indicated, swabbing of all classmates. All cases found positive are excluded and dealt with until no longer infectious.

Disinfection of bedding and domestic surroundings of the patients.

Disinfection of the classrooms when there is reason to suppose they are harbouring infection.

**Following-up
and work of
the Nurses.**

Following-up is the characteristic peculiarity of school medical practice. When parents are advised as to what should be done for their child's benefit, the matter is not allowed to rest with "I'll think about it." The Nurse visits to learn the result of these cogitations, and to do everything in the way of tactful reasoning to secure the needed attention.

The Nurses' duties are :—

- (1) Attending Routine Medical Inspections at schools.
(Inspections at Boys' Secondary Schools are carried out without a nurse being present.)
- (2) Attending special Medical Inspections at Clinics.
- (3) Attending at Treatment Clinics daily.
- (4) Carrying out independent Cleanliness Inspections at schools once every term.
- (5) Following-up in connection with (1), (2), (3) and (4), i.e. visiting homes to persuade parents to allow required treatment under our arrangements or other agency.
- (6) Swabbing of all Diphtheria contacts as reported daily from the Medical Officer of Health.
- (7) Giving treatment baths for Scabies.

The Dental, Ophthalmic, Open-Air and Special School nurses have their own special work to do. In order to give the Dental nurses time to do their following-up visits the nurses from the Open-Air Schools are each called upon to give a session per week to dental work.

In order to find a nurse for duty at the new Aural Clinic, the nurse from the Special School has been taken for one session a week.

In times of urgent need (due to sickness, etc.), the Open-Air and Special School nurses are called upon to take over the routine duties listed above.

In Table 24, Group V., the average number of Nurses' visits per school for the purpose of cleanliness inspections is given as 4.7. This figure does not mean that each child was inspected on an average 4.7 times. Each child was inspected three times only. These inspections have to be carried out at odd times as convenient, and it is not always possible to devote a whole session to the work. One complete inspection may mean two or three visits.

The proportion of children found unclean was slightly less than last year, and so also was the number who were cleansed at the Clinic. In no case were legal measures resorted to.

The following statistics of Nurses' work are additional to those given in the Appendix :—

Number of visits in connection with treatment	..	9,479
Number of visits in connection with cleanliness	..	341
Number of visits for the purpose of taking swabs	..	953
Number of swabs taken	.. ..	2,077
Visits to hospital	.. ..	555

Medical Treatment (a) *Minor Ailments.* These have been treated at three Clinics as in former years. The requirements of a Treatment Clinic are, with the exception of the waiting-room accommodation, well provided for at 18, Princess Square.

The temporary premises in use for some ten years at East Street, Stonehouse, were closed and the Clinic transferred to 30, High Street, Stonehouse, on January 2nd, 1931.

At Albert Road, Devonport, the waiting-room is inadequate.

The treatment room has to be used as a waiting-room, to the inconvenience of treatment. An electric sterilizer—a most essential piece of apparatus—has been installed during the year.

(b) *Tonsils and Adenoids.* The arrangements with the Royal Albert and Central Hospitals remain as heretofore. The number of children operated upon each year continues to increase, and reached 173 during the year. It would be better if all children could be kept in hospital for 48 hours after the operation or, if not, removed to their homes in an ambulance. It is hoped that arrangements will be made before long for the operative treatment of all these children in the City Hospital.

(c) *Tuberculosis.* All children suffering from Tuberculosis are handed over to the Tuberculosis Department for treatment, except when those who can obtain it privately.

(d) *Skin Disease.* Many common skin diseases are treated at the Minor Ailment Clinics. A bath for Scabies is installed at 18, Princess Square. In 1930, 243 medicated baths were given. A few children were sent to the City Hospital for in-patient treatment in order that, in the meantime, disinfection of bedding and clothing might be carried out.

Selected cases of Ringworm of the Head are treated with X-rays by Dr. Cheyne Wilson, in accordance with the terms of his contract with the City Council. Nineteen children have been so treated during the year. The treatment is most satisfactory in bringing about an immediate cure and in preventing the spread of the disease.

(e) (f) *External Eye Disease and Vision.* The Ophthalmic Specialist is steadily employed four sessions weekly. The numbers requiring refraction and prescription of glasses continued to show slight increase. In every case where spectacles are supplied, a note is sent to the Head Teacher asking that watch be kept to see that the child wears them as directed and that in the event of the glasses getting broken or lost the child be sent to the Clinic for repairs or renewal. It is safe to say that in 75 per cent of the children these instructions are effective.

(g) *Ear Disease.* The Aural Specialist started work at the School Clinic for one session a week on September 16th, 1930. At

present he is overwhelmed with work and appointments have to be made several weeks in advance. His report is as follows :—

“ The Aural Clinic was instituted in the middle of September, 1930, at the City School Clinic in Princess Square. It has thus existed for some five months and during that time 89 patients have been examined.

“ The Clinic is especially intended to treat cases of suppurative otitis media by zinc ionisation. It is equipped with a battery of 24 dry cells, which are preferred to the more fluctuating main supply, more especially since this is an alternating current, unsuitable without transformation to supply a current for ionisation. The current is regulated with a Leduc water rheostat and measured with a milliamperemeter.

“ Of the 89 patients seen, 38 have been treated by ionisation, and the results of treatment have been as follows : 5 patients have not been seen since the ionisation. Of the remainder, 24 were cases of unilateral otorrhœa ; of these 11 were cured of discharge, 8 were improved, 4 others relapsed after cure or improvement, and 1 showed no change. Of those with bilateral otorrhœa, 5 were cured of discharge in both ears ; in 2, one ear became dry and the other ear was improved ; one relapsed after cure ; in one there was great improvement in the right ear, but none in the left.

“ The season under review which includes the autumn and most of the winter, is especially prolific of catarrhs ; better results may reasonably be expected in the summer, and it is probable that an acute relapse will be easier to cure than the original chronic disease.

“ Of those patients who were not treated by ionisation, some were cases of simple acute or sub-acute otitis media and recovered under other treatment ; others suffered from diseased tonsils or adenoids, with or without otorrhœa ; these were referred elsewhere for operation.”

Dental Defect. Three dental surgeons and three dental nurses have been working continuously during the year. 15,965 children were inspected by annual routine ; 8,943 of these were found to require treatment, and 5,136 were actually treated. About half of the dentists' time, which should have been devoted to the treatment of those found defective at

routine inspection, was spent in the treatment of casuals and in the administration of anæsthetics. Provision for the annual inspection and treatment of between thirteen and fourteen thousand children remains to be made. This figure does not include the children in Secondary and Higher Schools.

The dentists' report as follows :—

Mr. Williams.—“Dental treatment in schools where the children are periodically examined is showing good results and proving beneficial. The pupils are now beginning to realise that they have teeth, and frequently request treatment of their own accord. They brush their teeth with greater regularity.

“The general condition of the mouth influences the health and physique of the child, but this fact is not appreciated as it should be by all parents. Children who have received continuous dental treatment leave school with far better mouths than those who have had little or none.

“Dental treatment for school children is curative and not preventive in character. As School Dentists, we are concerned with remedying dental defects and have only little chance in lowering the percentage of decayed teeth.

“The root of the matter goes deeper than the school age children ; the real line of attack should be attending to the diet and giving dental treatment to expectant and nursing mothers.

“The percentage of children who require treatment and do not have it, either on account of the refusal of the parent or failing to keep the appointment when made, is still large. The idea that the treatment of the teeth of the first dentition is unnecessary is very deep-rooted, and teeth which could be saved by filling have to be extracted when decay has gone on until the tooth is unsavable or an abscess has formed. One often hears : ‘The child never has any pain, and when he does he shall have it out.’ This means a large number of anæsthetic cases, which occupy the time of two Dental Surgeons and causes a constant influx of casual cases. I suggest that the present method of allowing children to attend as casual cases, whose parents have already refused treatment, contends more than any other factor against the real success of the Dental Clinic. It might be considered drastic to refuse ; but the knowledge that such cases whose parents have refused treatment will not be treated, would soon spread, and the example would induce a larger number

of parents to accept conservative treatment who at present refuse it.

“Complete success depends therefore on certain factors—dental inspection and treatment of expectant and nursing mothers ; inspection and treatment of the pre-school child ; inspection and treatment during school life and dental education. I am sure that if toothbrush drill were practised in all infant schools there would be a great improvement in the general condition of the mouths of children, and the habit once obtained would be kept up in after life.

“There is still a large number of schools which are not inspected by a School Dentist, and until other Clinics are opened to deal with these children there is bound to be a large amount of casual work, all of which cases require extractions, and so reduce the quantity of conservative treatment that should be done.”

Mr. Forrest.—“The number of children on routine inspection at schools shows improvement when compared to previous years. The difference denotes a progressive diminution in the relative extent of at least the more serious degrees of dental disease in the children.

“Parents are invited to inspections, when diet and mouth hygiene are demonstrated, and general instructions issued regarding the care of the teeth. The parents as a whole seem keen and interested in our work. Of course, there is a small percentage who will neither learn nor take advice.

“I have pleasure in thanking Head Teachers for their loyal support, and feel the success gained is, to a large extent, due to their interest and influence.

“A great proportion of time is devoted to ‘specials,’ i.e. cases of an urgent nature. This retards our routine work on the age groups.

“Re-examination, and when indicated, re-treatment of patients dealt with formerly, is systematically carried out.

“Each child should have an opportunity of at least two dental inspections per year. Many schools at present only receive one visit per year.”

Miss Stewart.—“In my area dental inspection and treatment was carried out in eleven elementary schools during the year. Five of these schools were inspected for the first time and all children under ten years of age were seen. The remaining six schools were

inspected for the second time and all children under eleven years of age were seen. Parents were requested to be present at the dental inspection of their children, and there was an average attendance of about fifty per cent. The dental nurse visited the homes of parents unable to attend the inspection, whose children required dental treatment, and explained to them the nature of the treatment required.

“ It is satisfactory to note that in the schools which have been re-treated there is a decrease in the number of permanent teeth extracted and a considerable increase in the number of permanent teeth saved by filling. During the year 667 permanent teeth were extracted and 1,320 permanent teeth were filled.

“ Many of the parents who refused treatment for their children at the school inspection have since brought them to the Clinic as casuals, in most cases suffering from violent toothache. These cases usually require multiple extractions under Nitrous Oxide anæsthesia.”

Crippling Defects.

These, for the purpose of the School Medical Service, may be divided into two classes :—

- (1) Those treated at the School Orthopædic Clinics—of which we have two.
- (2) Those treated by the Tuberculosis Department.

Both these classes include children who for longer or shorter periods have to be sent to special residential hospital schools.

This report is concerned only with those under class (1). The Orthopædic Specialist attends one of the Clinics every month or oftener if the number of children to be seen require it. The number dealt with at these sessions is 30. An Assistant School Medical Officer attends one of the Clinics every week. There are three whole-time Orthopædic assistants on duty daily. Children are treated daily by appointment by means of massage, electricity, exercises, splinting, plaster, boots, etc., as prescribed by the Medical Officers. Most of the appointments are for half-an-hour's attention. Boys under eight and girls of any age requiring hospital treatment as in-patients are sent to Ivybridge Hospital School by the School Medical Service on the recommendation of the Orthopædic Specialist. Others requiring it are sent to suitable hospital schools.

The Orthopædic arrangements allow for continuous treatment

to every Plymouth crippled school child unless the parents refuse it. The year's figures for the work done are as follows :—

Examinations by the Medical Officers at the Clinics—					
New cases	..	..	..	..	61
Re-examinations	..	..	..	..	396
Treatments given by the Orthopædic Assistants at					
appointed times	..	..	..	..	7,340
New surgical boots supplied	..	..	..	..	123
Repairs to surgical boots	..	..	..	..	1,102
New splint work	..	..	..	..	410
Repairs to splints	..	..	..	..	443
Plasters (splints, jackets)	..	..	..	..	194
Visits	..	..	..	..	44

Open-Air Education.

Classes are held in the playgrounds, parks, and gardens during the summer.

One thousand one hundred and twenty-eight children were medically examined by the Assistant Medical Officers before going to Maker for a fortnight's stay at the summer camp. A few were kept back on account of acute illness (colds or chicken-pox). In other cases (such as otitis) special instructions were given with reference to bathing or physical exercises.

The Head Teacher of the Mount Tamar Open-Air School reports as follows :—

Average number on roll—January to December,					
1930	..	..	..	..	152
Average attendance	..	..	..	..	113.8
Number admitted	..	..	..	..	90
Number discharged	..	..	..	..	84

Average length of stay of discharged children 1 yr. 10 mths

“ During the year 1930 the work at Mount Tamar Open-Air School has continued on much the same lines as in previous years.

“ H.M. Inspectors, Miss Peel and Miss Koetter, both visited the school and expressed complete satisfaction with everything they saw. In addition, the local inspectors and organisers have greatly assisted by their visits.

“ Good weather was experienced during the Easter Vacation School, which was in charge of Miss F. E. Pritchard, assisted by Nurse Fletcher and Miss Rider. The average attendance was 29.6.

“ Unfortunately the weather was very unsettled and the temperature low, so that very little sun-bathing was enjoyed during the summer. There was just a fortnight at Whitsuntide when the children could wear their sun garments for any length of time. On every possible occasion lessons were taken in the field, meals in the open air, and rest under the large sycamore tree in the field.

“ In May we had a dental inspection and the dentist expressed great satisfaction at the cleanliness of the children’s mouths. Most of the parents came to the inspection, and it was gratifying to find the way in which the parents appreciated what was being done for the children. The parents co-operated well and in most cases were willing to carry out all suggestions put to them by the dentist.

“ While the parents were here for the dental inspection, they were encouraged to look round the school and see the teachers upon any matter involving the school and its work. All parents and relatives, when they visit us, are always most appreciative of work done for the children. On several occasions when children have returned to their ordinary school, the parents have written very appreciative letters to the teachers and the nurse, and visits to the school by old scholars have been numerous.

“ During August the school remained open as a vacation school in charge of Miss F. E. Pritchard, assisted by Nurse Fletcher and Miss Ring. The weather was rather unsettled, but whenever possible the children were taken for rambles, picnics and bathing. The average attendance was 31.

During the summer months twenty boys were taken each week to the baths at Mount Wise and taught to swim. Thirteen won certificates for swimming twelve yards and over, while one boy won his medallion.

“ Fourteen pupils have been in residence all the year. On 6th October, the girls left residence and boys came in. Mrs. Cummings, the attendant, had difficulty in keeping the boys clean and tidy, as most of them only had the clothes they were wearing. Following on an appeal for help, the boys have been well supplied with stockings, jerseys and clothes. The Guild of Social Service helped considerably in fitting these boys up with sleeping suits and undergarments.

“ During the year we have made a heavy demand on the School

Children's Fund, but the generous granting of boots has enabled the children to attend school and has safeguarded their health. We feel extremely grateful to the fund.

"Most of the after-care work is carried out by the School Staff and Nurse. The children are encouraged to visit us, and Nurse visits the homes and supplies all information necessary.

"In November we were sorry to lose Nurse Fletcher, who was transferred to Clinic work. Nurse Bowden was appointed in her place. Through her steady and unflinching attention to the cleanliness of the children we have attained a high standard of cleanliness.

"It is pleasing to report that the south-west side of the rest shed has been made permanent by a wood and glass fixture, the windows of which open. We now look forward to the time when the south-east side will be similarly constructed. As this shed has to be used as a classroom, it is essential that it should be protected from wind and rain.

"One path leading from the boys' offices has been laid with bricks. This is ideal, and we trust that more of the muddy, slippery paths will soon be made more fit for use. The gravel sweep needs attention, as it is the only available place for games and physical exercises, and when it is so muddy the children cannot use it."

The Head Teacher of the Efford Open-Air School reports as follows :—

"There has been an average of 157 children on the roll during the past year, with an average attendance of 125.

"Eighty-three children have been admitted and 72 passed out by the Doctor as fit to return to the ordinary school.

"The first seven months of the year were difficult and tiring from the absence of a Resting-Shed (damaged by storm), which left us without our biggest playing and gymnasium ground and necessitated the children resting in five rooms, with every member of staff on duty without a break throughout the day.

"The new Resting-Shed is a great improvement on the old one, being ten feet longer, having roof lighting and being protected from the weather at the south-west end. The dining-room also has been re-decorated, an adequate water supply has been installed and two more classrooms have been fitted with slow combustion stoves.

“ Now every water tap can supply water at the same time and the entire school can wash hands before a meal in ten minutes. Previously only three or four taps could run at the same time and each washing occupied about twenty-five minutes. Thus a valuable economy of time and effort has been effected.

“ The heat in the classrooms has been another great economy of educational time as well as a great comfort. The rooms and the children’s blankets are always warm and dry first thing in the morning and, even after the rooms are opened up, sufficient warmth can be maintained for the children to continue their lessons without the constant interruption of warming exercises.

“ At the moment the school is more completely equipped than it has ever been in the past, and so nearly approximate to a model building that I have only a few suggestions to make for further improvements when the appropriate time arrives.”

Provision of Meals. Meals are provided at the Open-Air and Special Schools, and the cost of them is recovered from parents in accordance with the approved scale. With the exception of the seven children mentioned below and of one or two other special cases, there are no arrangements for the provision of meals under Sections 82–85 of the Education Act.

In February, at the direction of the Committee, the Head Teachers of seven typical school departments situated in the poorer districts of the City were requested to furnish information as to the necessity of providing milk to children during school hours. In the replies no single case was reported as likely to benefit by a daily supply of milk. The School Medical Officer was then requested to examine the children at one of these schools and to report his findings. Fifty-one children were selected by the Head Teacher, two sessions were devoted to their medical examination, and the parents were invited to be present. In no case where the parent was present was the parent of opinion that the child did not get enough food, and in no instance could definite signs of defect due to lack of nourishment be detected. Seven of them were of delicate appearance or were described as lacking in vigour. In the hope that an addition of half-a-pint of milk a day would prove beneficial, recommendation was made that this should be supplied for a period of a year. Arrangements were made for this to be done during school time, week ends, and holidays, starting from the beginning

of July. The children would be examined every three months. In the six months to December there were four increases in weight compared with standard weight for age: 81-83 per cent; 83-85 per cent; 86-87 per cent; and 91-95 per cent. There was no change in one, 81-81 per cent. There was one decrease, 77-74 per cent. In this last instance the mother was particularly certain that the child had benefited. The seventh had not appeared for examination.

School Baths. The baths at the Open-Air and Special Schools are in constant daily use. At the Open-Air School they are supervised by a Nurse, and at the Special School by an attendant.

Palace Court School. There is a male attendant for the boys and a female attendant for the girls.

During the year 5,872 boys have been bathed, and 5,379 girls.

York Street School. Here again there are two attendants.

The girls' baths are stated to average 45 per week, and the boys' 125.

Camel's Head School. No bath attendant. Up to July, 150 boys are stated to have been bathed and 100 girls. Since September the baths have not been in use.

Public Junior Mixed. The baths are used two sessions per week. There is a bath attendant. 1,071 children have been bathed.

Co-operation of Parents. Parents are invited to be present at all routine examinations. The 8,795 routine examinations have been attended by 5,370 parents, or 61 per cent.

There were 11 objections to examination. The figures for parents present at the 9,199 special examinations are not available, but it can safely be said that the percentage is at least as great as at routines. In most of the "specials" if the mother does not actually bring the child, she has bidden the child to attend.

Co-operation of Teachers. Allusion has already been made to the large amount of clerical work done by Head Teachers in connection with routine examinations. To them also there often falls the duty of taking the first step in bringing to our notice children who for any reason appear incapable of properly benefiting by the instruction in an ordinary school. No one is more

anxious than the school teacher to do everything possible for the physical welfare of the children, and to assist the School Medical Officers and Nurses in treatment, following-up, or in any other way suggested.

Co-operation of School Attendance Officers. Reports are sent from the Medical Department to the Attendance Department of all children "excluded from school" or "returned to school" by the Medical Officer of Health, School Medical Officers, School Dental Surgeons, Eye Specialist, Ear Specialist, Orthopædic Specialist, and Tuberculosis Officers.

The School Attendance Officer acquaints the Medical Department of all medical examinations required in connection with Employment Licences, Street Trading Licences, Entertainment Licences, Change of School for health reasons, Non-attendance at Domestic Centres, and other matters.

The Attendance Officer further assists the Medical Department by giving information concerning cases of Infectious Disease, and concerning children who are not attending school on account of crippling, tuberculosis, or other physical or mental defect, and concerning certified mental defectives who attend private schools instead of the Special School. Lastly the help of the Attendance Department is sought to enforce excluded children to attend the Clinics as required.

Co-operation of Voluntary Bodies. The following Voluntary Bodies have given assistance to the School Medical Service:—
Civic Guild of Help, in securing treatment through hospitals and dispensaries, where the parents were unable to obtain private treatment and where there were no facilities provided by the Corporation.

The National Society for the Prevention of Cruelty to Children is appealed to chiefly to secure cleansing of children.

The Society for the Voluntary Control of Mental Defectives is notified of all children leaving the Special Schools for Mental Defectives. This Society calls the Authority's attention to defective children discovered by their officers, and gives the Authority information regarding home conditions which is of the greatest value when there arises the question of sending a child to a Residential School. (See also section on defective children.)

The Committee of the School Children's Fund have during the year made grants as follows :—

697 pairs of boots to the value of £283 5s. 7½d. and food grants to the value of £7 0s. 0d.

- Blind, Deaf, Defective and Epileptics.** (a) The methods for ascertainment are as follows :
- (1) Special formal reports from Head Teachers concerning all children who appear, on account of either physical or mental defect, incapable of properly benefiting by the instruction in an ordinary school.
 - (2) Children brought to the notice of Medical Officers during routine visits. If the child appears to the Medical Officer to be defective, the Head Teacher is asked to formally notify as in (1).
 - (3) Reports from Attendance Officers.
 - (4) Reports from societies or individuals engaged in social work.
 - (5) Children attending Clinics who appear to the Medical Officers to be defective.

A special medical examination is arranged for every individual so brought to the notice of the School Medical Officer. The school teacher and the parent are invited to be present, and in the case of a supposed mental defective the Head Teacher of the Mental Special School as well.

The year's statistics concerning these special examinations are as follows :—

Reported as Mental Defectives. Number examined—86.

Certified and sent to Day Special School ..	62
Certified and sent to Residential Special School ..	1
Diagnosed dull and backward and recommended for Classes for such	9
Diagnosed physically defective and sent to Open-Air School	1
Returned to ordinary school for further observation	4
Diagnosed Idiot and reported to Local Control Authority	1
Diagnosed Imbecile and reported to Local Control Authority	8

Reported as Physical Defectives. Number examined—183.

Sent to Residential School	..	..	..	8
Sent to Open-Air School	..	..	..	163
Permanently excluded	..	..	..	1
Returned to ordinary school	..	..	..	11

Reported as Epileptic. Number examined—3.

Sent to Residential School	..	..	..	1
Sent to ordinary school	..	..	..	2

Reported as Deaf Number examined—6.

Certified deaf	..	..	..	3
Not certified deaf	..	..	..	3

Reported as Blind. Number examined—2.

Certified blind	..	..	..	1
Not certified blind	..	..	..	1

(b) Supervision of mentally defective children not in Special Schools.

A certain number of certified mentally defective children are sent to private schools. The names of such are notified to the School Medical Officer by the Attendance Department and they are medically examined annually in the same way as the children in attendance at the Special Schools. Twenty-one such examinations took place in 1930.

(c) The City of Plymouth Special Schools.

Salisbury Road Day Mental, Boys.

This school has been in temporary premises since 1920. During the succeeding ten years available space has diminished and the provision of a new and suitably designed building more centrally situated is long overdue.

At the close of the year there were 124 boys on the register with an average attendance of 109.

There has been considerable improvement in the arrangements for serving of the dinners.

Salisbury Road Day Mental, Girls.

The number on the register is 164, of whom 33 are boys under ten.

The following figures for the last six years are of interest :—

Year.	Number of Children Examined.	No. Certified Feeble-minded.	No. on Register of Special School	In Private Schools.	Total.
1925 ..	82	57	304	16	320
1926 ..	96	62	296	21	317
1927 ..	110	77	284	13	297
1928 ..	97	78	302	24	326
1929 ..	81	66	303	21	324
1930 ..	80	72	288	22	310

We are indebted to the Secretary of the Voluntary Control Association for the information on which the following statistics are based. They refer to 51 consecutive discharges from the Boys' Special School who had been kept under observation for two years.

In work—23. Of these 4 were reported to have held one job continuously for the two years—2 as mason's boys, 1 in a biscuit factory, and 1 as dairyman's assistant. Of the remaining 19, 1 was a hawker, 10 were "assistants" or errand boys, 2 were on farms, 3 were bootmaking (1 assisting his father and 1 assisting his uncle), 2 were boys in the Dockyard, and 1 was in the Army.

Doing odd jobs—11. Of these, 8 had for a period been errand boys, 1 gathered rags, 2 did casual gardening.

Almost continuously unemployed—7. Of these, 4 had tried to be errand boys, 1 had been in a ship for two months, 1 had for a short period been travelling with a fair, 1 was in poor health.

Continuously unemployed—9.

In an Institution—1.

Deaf School. Admitted, 6 ; Left, 7 ; Number on register, December 31st, 1930, 31, of whom 13 were boys and 18 girls ; Average attendance for the year, 27.4.

Classes for the Cure of Stammering. There are 62 children attending these classes. Classes for Elementary school children are of one hour's duration and are held weekly at various centres as follows :—

Ford	Two classes on Monday mornings.
Albert Road Clinic ..	Two classes on Monday afternoons.
East Street ..	Two classes on Wednesday mornings.
Treville Street ..	Two classes on Friday mornings.
18, Princess Square..	Two classes on Friday afternoons.

For Secondary School children there are two classes weekly, each of half-an-hour's duration. These are held on Wednesdays and Fridays at Sutton Secondary School from 12 to 12.30 p.m.

The teacher reports steady improvement in the condition of the children attending.

Young persons from the Unemployment Bureau have received instruction at the Secondary Centre and have expressed gratitude for the help given.

Secondary and Higher Schools. The children in these schools are inspected annually instead of as in Elementary Schools only three times in their school career. The inspection is more thorough and occupies considerably more time than in the case of the Elementary school child.

The Inspections started in 1925 and the numbers dealt with have been increased annually until now the whole of the Secondary and Higher Schools are being dealt with.

1925	1,042
1926	1,384
1927	1,801
1928	1,908
1929	1,969
1930	2,350

The arrangements for treatment of the defects discovered are those applying to the Elementary Schools excepting dental defect, where only urgent and necessitous cases can be dealt with.

The Statistical Tables required by the Board of Education are in the Appendix.

APPENDIX IX.

Report on the City Hospital.

BY IVOR LEWIS, M.D., M.S. (Lond.).

(Medical Superintendent.)

The Local Government Act of 1929 was a most important step in the endeavour to rationalise the municipal hospital provision of the country. Under this Act, the Public Health Authority becomes the public body whose duty it is to provide for the sick, not merely the destitute sick, but the general population. It removes from patients of public hospitals the theoretical necessity of proving destitution which previously existed. It requires Health Authorities, according to their local necessities, to provide hospital accommodation as such ; it demands that such services shall be efficient and progressive.

As a matter of fact the Act has really incorporated developments which had already taken place in many of our large towns under the old Poor Law. Many institutions in various large towns, particularly London and Birmingham, were already literally large general hospitals—with no "casual" or "destitute" side at all. A number of them had fine, well-equipped modern buildings, and the standard of work in them was certainly equal to that of voluntary hospitals. And the general administrative efficiency, although to a certain extent hindered by the residual red-tape of the old Poor Law, was superior to that of corresponding voluntary hospitals.

One is speaking, of course, only of the more progressive areas. Other authorities still regarded it as their duty to do as *little* as possible in the way of hospital provision ; others again provided good accommodation, but grudged an efficient staff and modern equipment, which even destitute sick patients had a right to demand.

The Act of 1929 takes the best of these hospitals and regards them as the standard. It definitely discriminates between sickness and destitution, and imposes on local authorities the duty of providing for the first as well as the second ; not as the poor laws did—provide for sickness only as an aspect of destitution.

Moreover, local authorities are required where possible to provide *separate institutions* for the sick, and for this purpose they are enabled to "appropriate" suitable institutions with a view to running them as efficient general hospitals.

In Plymouth, the Act has enabled hospital provisions to be simplified and rationalised. Instead of three "institutions" each with a few "sick" wards being maintained, it has enabled the City to concentrate all the hospital provision in one place.

The problem of developing a general hospital on modern lines from such beginnings is a big one; it is still more difficult when one has to concentrate into as many months the evolution which in hospitals elsewhere had been the steady growth of years.

The types of case we have to provide for at the City Hospital at present are:—

1. The chronic sick.
2. Maternity cases.
3. Children.
4. Acute medical and surgical cases.
5. Old and infirm.

It may be useful to refer briefly to some of these groups. The problem of classifying patients has been hampered by repairs and shortness of accommodation, but now acute Medical cases, acute Surgical cases, both male and female, obstetric and gynaecological cases, children—all have separate wards—similarly the chronic medical and chronic surgical cases have separate wards.

In the case of the children's wards the phenomenal prevalence of skin sepsis is a big strain on accommodation—scabies and impetigo cases, for example, take up a good deal of valuable space. Here the work of the Public Health department in disinfecting the patients' bedding at their homes has done much to reduce the number of return cases. While on this subject, one should mention that the amount of skin disease among children "boarded-out" is disquieting.

The chronic sick are more or less divisible into two classes from an administrative point of view: there are those who require constant skilled nursing and treatment; and there are those who are bedridden but only require a certain amount of caring for. About forty cases of the latter have been separately accommodated

at the City Hospital in Ward 16. There remains a group of old and infirm folk—accommodated in Wards 14 and 15. These are essentially cases requiring supervision—and only a part of them requires continuous treatment. It will almost certainly be found necessary to find other accommodation for some of these patients in the near future, if the pressure on the beds continues to grow as at present.

The maternity accommodation has had to be increased and now comprises two wards (23 beds)—a considerable proportion of the cases being abnormal. We hope further to develop our ante-natal work and the training of pupil midwives, and in this connection we hope not only to increase into an ordinary ante-natal clinic, but also to form a consultative clinic for the practitioners of the City and for the Maternity and Child Welfare medical officers. We are seriously handicapped, however, by lack of any out-patient accommodation.

The work of re-conditioning the premises generally has steadily progressed and still continues. The re-equipment of the wards has demanded much time and thought. Two hundred new bedsteads were required—of these a large number are of a "wheelbarrow" type, which can be easily wheeled by one nurse on to the verandahs. A type of ward locker has been selected which is not only capacious, durable, and of good appearance, but also serves as a bed table.

The Operating Theatre was not at all a bad building—but it required re-equipment—and now it is fitted with an excellent modern table, a shadowless lighting installation, and a good stock of surgical instruments. The surgical work has steadily increased, and it is still increasing. We are now doing more operations in a day than were done in a week a year ago. It will not be surprising, therefore, that the theatre accommodation is rather inadequate, and a new sterilising room is a necessity: the present one would be required as an anæsthetic room.

The planning and equipment of a new X-ray department has been another considerable task. We have now at the hospital a modern high-power plant, which is capable of very rapid exposures, and which gives radiograms of chests at two metres—free of the distortion which was associated with the photographs at close range with older types of plant. We have also secured a portable X-ray plant which will be invaluable for obtaining X-rays of patients in their beds in the wards, when they are too ill to be moved to the

X-ray department for the purpose. Its utility is considerably limited, however, by the absence of lifts. This is a serious drawback from other points of view ; patients have to suffer much distress (sometimes danger) in being carried, as well as may be, up and down stairs on stretchers. Two lifts are badly needed—one in each main block.

There are two matters of the first magnitude which demand mention.

One is the pressing (and long standing) necessity of a new central heating and hot-water supply for the whole hospital. The existing arrangement is obsolete and wasteful to a degree ; coal fires in the wards are dusty and inefficient, and need much labour ; the hot-water supply is erratic and often too rusty for use, and the expense in fuel is several times what it need be.

Another and an even more urgent necessity is the provision of a nurses' home. The present " Extension " is an open disgrace, and in spite of all the patching repairs, it will not provide quarters fit for nurses to spend three or four years of their life in.

It is difficult enough to obtain nurses under the best circumstances ; it is almost impossible when on arrival they find themselves without a decent place to sleep in. This problem will have to be faced soon, it seems to me that it might as well be faced right now ; the hospital will then not only have the building, but will also be in a fair way to getting the nurses.

APPENDIX X

The Health of The Port of Plymouth in 1930.

BY W. S. WALTON, M.B., B.S., D.P.H. (Dunelm).

(Port Medical Officer.)

I have pleasure in presenting to you my first Annual Report, as Port Medical Officer, on the work carried out by the Plymouth Port Sanitary Authority during the year ended 31st December, 1930.

Having regard to continuity of policy and administrative control, the Department laboured under a great disadvantage during the year. The untimely death of Dr. D. Davidson in April, after a long illness, robbed the Port of one of the most popular and brilliant Medical Officers it has ever had. No fewer than ten medical officers performed boarding duties in the course of the year; the Port work being carried out in a great part by locums and deputies owing to an abnormal amount of sickness among the shore staff.

No departure has been made in the main from the administrative policy so well laid down by the late Dr. Davidson. It was not found possible to embark on any new undertakings or investigations, and in consequence, for the compilation of this report, I have relied on the monthly reports made by Dr. Mellows (the Assistant Port Medical Officer) up to August, of Dr. Morton for October and November, and of my own for the months of August, September and December.

The floating population dealt with comprised some 492,726 persons, and among these were 1,401 cases of sickness, including 637 of an infectious nature. Sixty deaths occurred among this series, and all these cases were subject to most careful enquiries by the medical officers. The number of cases actually landed was 162, of which 28 were removed to shore hospitals.

Eighteen thousand two hundred and sixteen aliens were medically inspected and detailed medical examinations were conducted in respect of 413 of these persons, 2 of whom were refused permission to land.

No cases of Plague were encountered and no plague-infected rats were detected on ship or shore.

The mooted replacement of the 1907 Regulations as to Cholera, Yellow Fever, and Plague, and the Port Sanitary Authorities (Infectious Diseases) Regulations, 1920, by regulations in conformity with the International Sanitary Convention, 1926, is eagerly awaited. It is hoped that Port Sanitary Authorities, with definite legal backing, will then find themselves in a stronger position to carry out their duties of inspection.

An interesting communication was received during the year from the Plymouth Air Port Control Officer with reference to passengers landing on the Municipal Aerodrome (Non-Customs). The Port Medical Officer will make the necessary examinations of persons landing before they are allowed to leave the aerodrome site. This may be the forerunner of the development of a new branch of the Port Medical Service. The Plymouth Chamber of Commerce has high hopes of the City becoming an important airport, and additional land has been acquired and partly laid out on the Roborough site.

In conclusion, I would like to make the customary but sincere acknowledgement of the kindly co-operation and assistance afforded to me since taking over duties in August. More especially would I mention that of the Inspector, Mr. Bulleid, and members of the staff of the Authority, the Naval Authorities, His Majesty's Customs, the Superintendent and Officials of the Great Western Docks, the Agents and Staffs of the Shipping Companies, the Scotland Yard representatives, the Press, and the Consular bodies. To Dr. Mellows, I am greatly indebted for his loyal assistance on all occasions and for his helpful advice on my arrival, while Dr. Peirson and Dr. Hynes have never failed to come to our assistance during rush periods.

JURISDICTION OF THE PORT.

The Plymouth Port Sanitary Authority was constituted in the year 1882 by a provisional order of the Local Government Board dated 16th May, 1882, which was subsequently confirmed by Parliament, and also by an amending Order for the Permanent Constitution of the Port Sanitary Authority of the 4th November, 1902. This Order came into operation on the 1st December, 1902. On the 9th November, 1923, the Corporation of Plymouth was constituted the Port Sanitary Authority. The limits of the Port

of Plymouth as defined by His Majesty's Customs : " commence from the west side of the Erme mouth at the entrance into Bigbury Bay, in a supposed direct or right line westward into a headland commonly called Rame Head, and from thence in a supposed direct or right line into the East of a river called the Seaton, together with all bays, havens, harbours, sounds, bars, rivers, streams, strands, channels, creeks, roads, shores, and places within the said limits contained, and which said limits are also delineated and shown by the plan or chart thereof thereto annexed marked A. (extract from Return to Exchequer Writ filed and enrolled at Westminster in the 4th year of the reign of Queen Victoria, i.e., in 1841). The Boarding stations for all vessels arriving at or departing from the Port of Plymouth and the Creek of Calstock, to bring to for the boarding or landing of Officers of Customs, are that portion of the Sound set apart as the anchorage ground for merchant vessels, also the Cattewater."

A small map has been printed, from which you will readily see the extent of the foreshore which the officials have to patrol from time to time, making the necessary visits to the vessels discharging or loading at the various wharves, docks, etc., in the execution of their duties.

The harbour of Plymouth affords a magnificent natural Port and lies within the estuaries of the Rivers Tamar, Tavy, St. Germans and the Plym. The Breakwater, lying some two miles out and one and a quarter miles in length, encloses an area of over five square miles for possible anchorage. The condition of the tide places no restriction on movements of ships, which come and go at all hours. The work of inspection and safeguarding the country against invasion by infectious diseases from without thus goes on day and night.

The large ocean liners use Plymouth solely as a port of call. Passengers landing are transferred by tender to the Millbay Docks Station and from there are able to reach London in four hours, a great saving of time compared with a further twenty-four hours by sea route. The vessels are cleared in times varying from fifteen minutes to two and a half hours, depending on the number of passengers and mail to be landed. The Boarding Officials—Port Medical Officer, Customs, Police, and the Immigration Department—go out with the tenders, and the Examination and Medical Inspection of Aliens usually takes place on board the liners.

The comparatively brief stay of the mailboats in the Port renders the work of the Port Sanitary Authority in connection with these vessels very different from that of the other large ports in the Kingdom. There is no accommodation for the docking of liners here, and most ships are usually racing for a tide at a Channel Port further on. Inspections must be carried out rapidly and decisions as to action arrived at immediately. The majority of these vessels are touching Great Britain for the first time since leaving ports (perhaps infected ports) in one or other of the following countries : America, South America, India, China, Africa, including the West Coast, and Australia.

I. AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1930.

Mailboats. The number of calls made by mailboats at Plymouth in 1930 was 789, this figure surpassing that of the record of 744 calls made in 1929. An interesting table is appended showing the development of the use of the port by passenger vessels since 1921 :—

<i>Year.</i>	<i>No. of vessels.</i>	<i>Passengers. landed.</i>
1921 ..	350	16,519
1923 ..	541	23,350
1925 ..	546	28,817
1927 ..	676	34,929
1929 ..	744	39,086
1930 ..	789	41,086

In all, 3,416 vessels (apart from those engaged in the fishing trade) arrived from foreign and coastwise, the tonnage inspected amounting to 7,343,851.

Eight hundred and eight vessels were visited by the Medical Officers and 1,325 by your Inspector. In addition, 62 vessels were boarded by the Medical Officers accompanied by the Inspector. Three hundred and fourteen defects were found on 83 vessels, and in the case of 75 vessels the defects were remedied while in Port. Further details will be found in Table 37.

II. CHARACTER OF TRADE OF PORT.

(a) **Passenger Traffic.** The number of persons passing through the Port was over 41,000, including 20,000 aliens, the latter figure being made up in the main part by American tourists. This traffic has been increasing steadily during recent years and usually reaches its height during the months of June and July.

(b) **Cargo Traffic.** *Coastwise.* An appreciable drop occurred in the coastwise traffic during the year, this being in keeping with the general depression of trade throughout the Country. Coastwise cargo traffic consists mainly of transhipped general cargoes from London and Liverpool, coal from the North-East Ports and general goods from the Bristol Channel Ports.

Foreign. The foreign trade remained much the same as in the previous year, grain from Russia, Black Sea and South America being the main import. The seasonal vegetable and fruit trade from France and the Channel Islands was maintained. Among the cargo brought by mailboats it is interesting to observe that over £4,000,000 worth in gold was landed at Plymouth during the year. For further details as to the trade of the Port, see Table 38.

III. SOURCE OF WATER SUPPLY.

(a) **For the Port.**

Great Western Docks	}	Plymouth Corporation Water
Cattedown & Sutton Harbour		Department from hydrants on the wharves.

(b) **For Shipping.** The only water boat supplying fresh water to shipping in the Port is the *Ela*, of 5,500 gallons capacity. The *John Wesley* is no longer used for the purpose.

(c) **Number of Water Boats and their Sanitary Condition.** For shipping, water is derived either from the hydrants on the wharves or from the water boat *Ela*.

Information was received during the year that the members of the crew of one of the fishing vessels were complaining of the bad taste and consequent digestive troubles after using water from the tanks of the vessel. As is usual in all cases of complaint *re* water supply, samples were taken for both bacteriological and chemical

examination, and the tank was ordered to be cleaned out and a fresh supply of water substituted. In this case, however, the tank was replaced by a new one. The Analyst and Bacteriologist reported that nothing deleterious was found on their investigations.

The tanks of the water boat *Ela* were inspected periodically throughout the year and found to be in a wholesome condition.

IV. INFECTIOUS DISEASE.

The number of cases of infectious sickness investigated by the Medical Officers was 637, and of these 81 had been disposed of prior to arrival; 473 proceeded in the ship and 83 were landed at Plymouth. The increase of cases in comparison with previous years is in direct ratio with the increased number of mailboats calling. Smallpox, as usual, occupied the attention of the Department, particularly in March, and especially so from Eastern arrivals, but no actual case was seen in the Port during the course of the year.

(1) & (2) ARRANGEMENTS FOR DETECTION AND NOTIFICATION OF INFECTIOUS DISEASE ON INWARD VESSELS.

Information regarding the occurrence of infectious disease on inward vessels is derived from the following sources, viz. :—

(i) *Ministry of Health.*

(a) The Port Sanitary Authority is kept informed as to the incidence and occurrence of Infectious Diseases in home and foreign ports by a weekly record received from the Ministry of Health. A special watch is kept with regard to vessels arriving from such ports.

(b) The Port Sanitary Authority is notified specially by the Ministry of Health when the latter receive any information, through international channels, of a vessel leaving a foreign port for Plymouth and having landed or having aboard cases of a major infectious nature.

(ii) *Pilots.*

At Plymouth, where pilotage for the passenger boats is compulsory, apart from giving instructions concerning local routine and the quarantine moorings, the pilots cannot render much assistance. Usually, the tenders leave the shore for the

mailboat anchorage before the pilot has boarded the vessel outside the breakwater.

Coastal boats more frequently use an inside pilot.

A list of infected ports is sent to the Trinity Pilots periodically for their information.

(iii) *Wireless.*

Most mailboats wireless ahead to the shore station at the Lizard the approximate time of their arrival and as to the state of health aboard. The information is received by the Agents, who communicate with the Port Sanitary Authority. The information is generally, though not always, reliable. Printed forms are supplied to all vessels calling at the port, requesting this wireless notification regarding infectious disease. If wireless notification of sickness were made compulsory in the Port the result would lead to much greater efficiency and expedition of clearances.

(iv) *His Majesty's Customs.*

A list of infected ports is issued by this department approximately every month, with a request that vessels arriving from such ports be detained by the Customs Officer for examination by the Port Medical Officer and Inspector.

All cargo vessels are visited immediately after arrival by the Customs Officers, who report to the Port Sanitary Authority any cases of sickness. This service, willingly performed by officers of the Customs Waterguard, is of great assistance for the taking of prompt action in the case of infectious disease on cargo vessels.

(v) *Other Boarding Officials.*

Through working in close harmony with the other boarding officials, the Medical Officer learns occasionally, through the media of the Immigration Department, Press representatives, and the Scotland Yard officials, of sickness otherwise not reported. Two instances of this occurred during the year and were specially investigated and dealt with.

(vi) *Naval Health Authorities.*

Complete co-ordination exists between the Naval Health Authorities and the Port Sanitary officials. Weekly notifica-

tions of infectious diseases occurring in the Port are interchanged between the two departments. As sick naval ratings from foreign stations are frequently landing from mailboats, this co-ordination is of great advantage to the efficient working of both the Naval and the Port Sanitary staff.

(3) WHAT VESSELS ARE BOARDED ON ARRIVAL, BY WHOM WHERE AND HOW.

All *Mailboats* and *Passenger Vessels* are boarded by the Port Medical Officers as soon as they arrive. As these vessels come to anchor, either in Cawsand Bay or in the Sound, the Medical Officers go out usually with the tenders and use the Port Sanitary launch for transferring to other vessels, if necessary. The customary procedure in this Port is for the Port Medical Officer to accompany the Boarding Officer of His Majesty's Customs up the gangway and listen to the replies given by the ship's surgeon to the regulation health questions put by the Customs Officer. The Medical Officer then proceeds to investigate any case of reported sickness before the other shore officials go on board, and takes action appropriate to his findings and to the disease in question. If no case of infectious disease is reported and the Boarding Medical Officer is satisfied that all is well, the other shore officials follow and board immediately from the tender.

Cargo Vessels entering the Port are boarded by an Officer of Customs and as soon as possible afterwards by the Inspector. These vessels thus receive interrogation from three sources, viz. : the Pilot (if any), Customs Officer and the Port Sanitary Inspector, who, in addition to interrogation, inspects the vessel and crews' quarters for any possible concealment of illness. Any suspicious circumstances are reported to the Medical Officer.

(4) ARRANGEMENTS FOR DISPOSAL OF CASES OF INFECTIOUS DISEASE, AND FOR OBSERVATION OR SURVEILLANCE OF CONTACTS.

For purposes of administration and disposal, the infectious diseases fall into four groups :—

- Group 1. *The major infectious diseases ;*
- Group 2. *The notifiable infectious diseases ;*
- Group 3. *The minor infectious diseases ;*
- Group 4. *The minor infectious diseases not requiring isolation.*

Group 1 comprises Cholera, Plague, Smallpox, Typhus Fever,

and Yellow Fever. Such cases are not allowed to land, but are transferred in the motor launch *Clytie** from the vessels to the hospital ship *Flamingo* in Jennycliffe Bay and there detained until deemed no longer infectious. All persons on board are regarded as contacts, watched and examined daily during their stay in the Port. When there are passengers landing, their names and addresses are taken and forwarded to the Medical Officer of Health of the district to which they are proceeding, so that they may be kept under observation until the quarantine period has elapsed. All parts of the ship liable to harbour infection, such as cabins, also bedding and clothing, are disinfected, generally with sulphur, and the vessel is then allowed to proceed.

In case of Smallpox, vaccination would be offered to everyone. Delousing of Typhus Fever contacts would be undertaken at one of the City Isolation Hospitals.

The hospital ship *Flamingo*, the last of the three hospital ships which used to lie at anchor in Jennycliffe Bay, has had twenty years useful service. Its place will shortly be taken by the new isolation hospital at Lee Mill. The arrangements for dealing with sea-borne cases in this group will then necessitate the case being brought ashore in the department's launch and transferred by ambulance to Lee Mill.

Group 2, for which accommodation is normally provided in the City hospitals, comprises Acute Polio-encephalitis, Acute Polio-myelitis, Cerebro-Spinal Fever, Continued Fever, Diphtheria (including Membranous Croup), Dysentery, Encephalitis Lethargica, Enteric Fever, Paratyphoid Fever, Puerperal Fever, Relapsing Fever, and Scarlet Fever. These diseases are taken into the isolation hospitals at Mount Gold or Swilly.

Group 3, for which no accommodation is provided, but nevertheless require isolation, comprises Chicken-pox, Erysipelas, Insanity, Measles and German Measles, Mumps, Ophthalmia Neonatorum, Tuberculosis, and Whooping Cough. These cases are not taken into the City isolation hospitals. The Company's Agents are required to make arrangements for isolation locally in a nursing home, private house or infirmary for such cases.

Group 4, although infectious, requires no isolation, and individuals must make their own arrangements for treatment. This

* The motor launch *Clytie* has now been replaced by a larger and more efficient motor cruiser, the *Golden Hind*.

miscellaneous group includes Acute Influenzal Pneumonia, Acute Primary Pneumonia, Favus, Influenza, Leprosy, Malaria, Ring-worm, Scabies, Trachoma, and Venereal Diseases (admitted to the Venereal Department at the South Devon and East Cornwall Hospital).

This group classification is being revised and will be reprinted and distributed to ships' surgeons early in 1931.

(5) ARRANGEMENTS FOR DISINFECTION OF INFECTED QUARTERS, BEDDING, CLOTHING, ETC.

When cases of infectious disease are removed from ships in the motor launch *Clytie* to the hospital ship *Flamingo*, or to hospital ashore, the quarters on board and later the cabin of the *Clytie*, are disinfected with Sulphur Dioxide from canisters, or sprayed with formalin. Clothing, bedding, etc., is conveyed by ambulance to the City Isolation Hospital at Swilly, where a Washington Lyons high-pressure apparatus is available.

Crews' quarters are frequently sprayed with Solution "D," or fumigated with "Sulphume" for the destruction of vermin.

(6) ARRANGEMENTS FOR CLEANSING OF PERSONS.

Arrangements are made for the cleansing and delousing of dirty or verminous persons at the Mount Gold Isolation Hospital.

(7) ARRANGEMENTS FOR AMBULANCE TRANSPORT.

Cases of infectious disease are brought ashore in the Authority's launch, transferred into the motor ambulance of the City Health Department and then removed to one of the isolation hospitals.

(8) ARRANGEMENTS FOR DETECTION AND TREATMENT OF VENEREAL DISEASE AMONGST SAILORS.

All ships coming into the docks are boarded by the Port Sanitary Inspector in the course of his duty, and while making enquiries about sickness on board, he supplies, where necessary, any information concerning Venereal Diseases and pamphlets, giving the times and days of the clinics at the South Devon and East Cornwall Hospital.

By International Agreement of 1925, all ports provide free confidential treatment for venereal diseases, irrespective of nationality. These facilities have not been properly understood by foreign seamen, nor even by our own seamen, but now that they are

getting more widely known and appreciated, the number coming up for treatment is still increasing.

(9) ARRANGEMENTS FOR BACTERIOLOGICAL EXAMINATION OF RATS.

These examinations are carried out by the City Pathologist.

(10) ARRANGEMENTS FOR OTHER BACTERIOLOGICAL EXAMINATIONS.

These include investigations such as water samples, sewage effluents and oysters. Throat swabs and other clinical material, together with the above, are examined for the Authority by the City Pathologist.

PLAGUE, CHOLERA, YELLOW FEVER, AND TYPHUS FEVER.

No cases of these diseases occurred on ships coming into the Port. Strict surveillance was kept on all vessels arriving from "infected" or "suspected" ports.

SMALLPOX.

During the year six cases were disposed of prior to the arrival of the vessels at Plymouth.

13.2.30. A notification was received from the Ministry of Health to the effect that the mail steamer *Ranchi* had landed a case of Smallpox at Suez on 2nd February, and requesting that all possible preventative measures should be taken.

The vessel arrived here on the 13th February, which was still within the period of incubation of the disease. Accordingly, the Agents and other officials remained on the tender whilst the Medical Officer investigated the health conditions on board.

Every member of the European and native crew was examined individually, also the passengers landing at this port. The correct names and addresses of the latter were taken and communicated to the various Medical Officers of Health of the districts to which they were proceeding.

No further case or suspicion of the disease was to be found in the ship, and the vessel was allowed to proceed "all well" to London.

6.3.30. Wireless information was received from the steamship *Mantua* on the day before her arrival at Plymouth that she had landed one confluent case of Smallpox at Singapore on the 6th February, a modified one at Suez on the 23rd February, and that she had a member of the lascar crew on board who appeared to be suffering from the disease.

The Assistant Medical Officer, on boarding and examining the case, formed the opinion that the condition was probably one of Chicken-pox, but in view of the gravity attaching to any error of judgment and the diagnosis that had already been made, it was decided to remove the patient to the hospital ship *Flamingo* under observation. Later, this diagnosis was definitely established and the man was discharged when the eruption had cleared up after three weeks' treatment.

In view of the element of doubt, the most stringent precautionary measures were taken on the *Mantua*; these included the restriction to the barest minimum of the number of officials boarding the vessel, and the conduction of the Immigration examination of passengers landing on the tender.

8.3.30. Notification was received from the Ministry of Health to the effect that the steamship *Margha* from Indian ports had landed a case of Smallpox at Madras on the 3rd February and another at Aden on the 16th February. The crew and passengers landing were systematically examined, but no suspicion of any further case was found. The vessel was allowed to proceed to London after full precautionary measures had been taken, and the Port Medical Officer, London, was informed of the findings and action taken at Plymouth.

20.3.30. A notification was received from the Ministry of Health that the steamship *Maloja* from Australian ports via Bombay had landed a case of Smallpox at Suez on the 9th March. On boarding and investigation, it was found that the ship's surgeon had previously made a diagnosis of Chicken-pox. At Suez, however, two Port Medical Officers, who were French, confirmed the diagnosis, but stated that their instructions were to regard such a condition as Smallpox in all adults. Consequently, the patient was removed to an isolation hospital ashore in company with a fellow native, who was the most direct contact, inasmuch that he had been personally looking after the case.

Nevertheless, the most rigorous precautionary measures were exercised at this port, including complete examination of the whole European and native crew, also passengers landing at Plymouth, whose correct names and addresses were taken for notification purposes. The range of possible contacts was kept down to the barest minimum by the co-operation of the various departments concerned.

In view of the above facts and the health conditions on board, the vessel was allowed to proceed "all well" to London.

SCARLET FEVER.

On the 4th October, the s.s. *Alaunia* arrived at this Port from Montreal and Quebec bound for London, having wirelessly ahead that she had a case of Scarlet Fever on board. The case and contacts were thoroughly investigated. The patient was removed ashore in the *Clytie* and thence to Mount Gold Hospital for isolation and treatment.

MALARIA.

Sixteen cases of Malaria and one of Blackwater Fever were landed at Plymouth.

The high number of cases of Malaria on vessels arriving from the West Coast of Africa was maintained.

A special report on the Malarial Incidence in these ships was drawn up and submitted to the Ministry of Health.

PSITTACOSIS.

In accordance with a request from the Ministry of Health that this department should co-operate with them in their investigation of Psittacosis, the so-called "Parrot Disease," the staff are making enquiries as to the existence of dead or sick birds on all boats from West and South Africa, South and Central America, the West Indies and Mexico.

A circular letter was sent to the captains of all likely ships suggesting that instructions be issued to members of the crew and passengers, by means of printed notices in the ship, that any dead or sick parrots be delivered to the Ship's Surgeon and thence by him to the Boarding Medical Officer on arrival at Plymouth.

Only one dead parrot has been collected by these means, and it was despatched the same day in a hermetically sealed tin to the Pathological Laboratory of the Ministry of Health.

An Amendment, under the Public Health Act, 1896, called the Parrots (Prohibition of Import) Regulations, 1930, was introduced to prevent further birds of the parrot family, of which there are 637 varieties, coming into the country.

Two parrots were allowed to be landed conditionally from Naval ships under special circumstances. Both ships had been in home waters for more than one year and neither parrot had been in contact with any other bird.

RABIES.

An urgent wireless message was received two days before the arrival of the steamship *Domala* that she had a sick dog on board which had bitten two persons and required us to take such steps as we conceived necessary. Accordingly, when the ship arrived, the Assistant Medical Officer of Health boarded her in company with Ministry of Agriculture officials and representatives of the local Constabulary.

On investigation, the suspected dog, which had been chloroformed, appeared to be definitely Rabitic. Five persons, who had either been bitten or been in direct contact with the dog, were immediately landed and proceeded to London for Pasteur Rabies immunisation treatment. A lady passenger, who also stated that she had been bitten, was suffering from Heart Disease and too ill to travel. She was landed into a Nursing Home the next morning and arrangements were made by the Ministry of Health for the serum to be sent to Plymouth and the injections made by a local physician.

The dog's brain was sent to the Ministry of Agriculture's pathologist for examination and conformed with the suspected diagnosis of Rabies.

VENEREAL DISEASE.

On arrival of the steamship *Macedonia* from Bombay, the Ship's Surgeon reported one of the crew to be suffering from a coarse macular rash with enlarged glands of the groin. On investigation, this was deemed to be due to acute and purulent venereal disease, and in view of the state of the man, he was landed for immediate specific treatment.

MISCELLANEOUS DISEASES.

On visiting the s.s. *Scania*, a Swedish cargo vessel discharging mineral ore from Huelva, the Port Sanitary Inspector reported that he found three seamen suffering from rashes. On investigation by the Port Medical Officer, two of these men were found to be affected with Impetigo and one with Ringworm, and were referred to a private practitioner for treatment.

On the arrival of the s.s. *Daybreak* from San Nicolas, the Port Sanitary Inspector reported that he was shown a member of the crew who was suffering from multiple papules over his body, face and arms. The vessel was held up pending the arrival of the Port Medical Officer. It was found that each papule was the seat of some larvæ of a fly probably tropical in nature. Several were extracted and I am indebted to Dr. Mellows, the Assistant Medical Officer of Health, for investigating the samples we sent him at the London School of Hygiene and Tropical Medicine. He reported that they were the larvæ of the biting fly "*Chrysomyia*" (the American screw-worm), which occurs in the Americas from Canada to Patagonia, though abundant only in the warmer districts. The man's disease was diagnosed, therefore, as "Myiasis," a condition similar to that of "Warbles" in cattle.

V. MEASURES AGAINST RODENTS.

(1) STEPS TAKEN FOR DETECTION OF RODENT PLAGUE.

(a) *In Ships in the Port.* Ships from "Infected Ports" are subjected to close enquiries by the Medical Officers and Inspector. Dead rats recovered during the working of the cargo are seized by the ratcatchers or stevedores and examined and dissected by the Port Medical Officers. A large percentage of the carcasses are sent to the City Pathologist for detailed microscopical examination. Vessels, other than those from "Infected Ports," reporting mortality among the rats are also subjected to constant surveillance by the Inspector and ratcatchers. Traps and dogs are used by the ratcatchers on these vessels daily during their stay in port. All rats, whether found dead or trapped, are submitted for inspection each day.

(b) *On Quays, Wharves, Warehouses, etc., in the Vicinity of the Port.* Frequent, and in many cases daily, visits were made to warehouses during the year for the purposes of ascertaining the rat

prevalence and the condition of the rat population. Rats found killed, and trapped, or poisoned by the ratcatchers were brought to the office and examined by one of the Medical Officers. No case of rodent plague was detected during the year 1930.

For further details of rats destroyed, see Table 44.

(2) MEASURES TAKEN TO PREVENT THE PASSAGE OF RATS BETWEEN SHIPS AND THE SHORE.

All vessels calling at the Port to discharge cargoes of grain or any other goods from infected ports are dealt with under the Plague and Cholera Regulations, 1907, and the Rats and Mice (Destruction) Act, 1919.

On 30 vessels arriving at Plymouth from plague "infected" or "suspected" ports, printed precautions were issued and the requirements carried into effect, viz. :—

- (1) Ship to be moored not less than six feet from quay.
- (2) Gangways to be removed at night.
- (3) Protectors to be fixed on all hawsers from ship to shore.
- (4) Or hawsers frapped with canvas and freshly tarred every night.

The Inspector makes daily visits to see that these requirements are complied with.

(3) METHODS OF DERATISATION—

(a) *Ships.* No attempt is made to deal with rats on mailboats during their brief stay off-shore in the Port.

The ratcatchers, with the aid of traps, dogs, and poison baits, endeavour to destroy rats on vessels remaining in the Port. Fumigation is resorted to only in exceptional degrees of rat infestation. An arrangement exists whereby a London firm undertakes to do this at short notice.

Plymouth is not an "Approved Port" qualified for deratisation and the issue of deratisation certificates and deratisation exemption certificates under the terms of Article 28 of the International Sanitary Convention.

(b) *Premises in the Vicinity of Docks or Quays.* Measures taken under this heading include the use of traps, dogs and poison baits. In addition, several owners place cats in their warehouses. Baits used include phosphorous paste and barium carbonate. Very good

results have been obtained by the use of the latter in conjunction with fish meal and a slight spraying of aniseed. Frequent changes are rung with the baits, one variation meeting with considerable success was the use of phosphorous paste covered with a layer of sweetened condensed milk. As many as five and six rats were found lying dead by the bowl on several occasions.

During the past year, a more intensive campaign was conducted against the rodent population. Much time was spent in directing, advising and helping merchants around the docks to rid their stores of this troublesome and costly pest.

(4) MEASURES TAKEN FOR THE DETECTION OF RAT PREVALENCE IN SHIPS AND ON SHORE.

Rat prevalence is estimated by consideration of a number of factors, and consequently the Inspector and the ratcatchers are instructed to take cognizance of the following findings while inspecting holds and warehouses.

- (a) The number and condition (recent or remote) of droppings.
- (b) The number and condition (recent or remote) of runs and nests.
- (c) The damage done by gnawing to stores, building structures, bulkheads, boats, etc.

Dunnage and other harbourage material are disturbed and turned over whenever possible. When, from consideration of the reports of the ratcatchers, it is deemed that infestation of any warehouses is excessive, intensive "rat drives" are made.

(5) RAT PROOFING.

- (a) *To what Extent are Docks, Wharves, Warehouses, etc., Rat Proof?*

The Great Western Railway, as usual, have maintained their stores in a cleanly condition, painting and limewashing being effected where necessary. Several wooden floors have been pulled up and replaced by concrete.

At Victoria Wharves a new warehouse for goods in transit has been erected. Unfortunately, the owners did not see their way clear to comply with the suggestions regarding the raising of the floor level to the height of the chassis of a lorry and with a projecting ledge to make the shed rat-proof, as was done with the last ware-

house erected by them. The latter is an excellent example of a rat-proof warehouse.

(b) *Action Taken to Extend Rat-Proofing.*

ON SHORE.

Most of the principal warehouses have concrete floors, although in the Great Western Docks many old wooden ones still exist. These are being gradually replaced. The following are the more important stores :—

GREAT WESTERN DOCKS.

West Wharf. Vessels discharge grain, which is stored here, and goods such as fruit and vegetables, paper, etc., which are soon removed. Several floors are of concrete, but quite a good area still needs converting. The channel which runs the length of the buildings on the outside is covered with wood and provides rat harbourage ; steps have been taken to have this remedied.

Black Shed. Vessels discharge paper and other goods, which are soon cleared. The floor is of concrete.

Numbered Stores. Grain, cattle food, flour, etc., are stored for long periods. The majority have wooden floors.

Millbay and Trinity Piers, and Clyde Stores. Vessels discharge general goods, which are soon cleared. The majority of the floors are of concrete.

Rag and Bone Store. This building has an earth floor ; rats are caught here practically every day.

VICTORIA WHARVES.

Vessels discharge cattle cake, flour, fertilizer, sugar, etc., which are stored.

General goods are quickly removed.

The floors are all of concrete. The warehouse on the eastern side is the finest we have from the point of view of rat-proofing. The floor is raised some three feet from the ground level and a rat-proof ledge projects around the building.

SUTTON HARBOUR.

Steamers and sailing vessels discharge fruit and vegetables. Nearly all the floors are of wood, except at the marine dealers' stores, where there are earth floors.

All these stores are visited daily by the ratcatchers, and periodically by the Inspector, who advises as to the use of poisons, traps and other measures for the destruction of the rodents.

MEDICAL WORK UNDER THE ALIENS ORDER, 1920.

The number of aliens landed at this Port during the year was 17,679, in addition to 537 alien seamen, all of whom were either medically inspected or examined; 413 were subjected to detailed examination for various reasons. Those staying for more than three months were treated as immigrants and subjected to more careful medical examination, so that no alien should be permitted to land who, by reason of physical or mental infirmity, might become a burden or charge upon the community. It was found necessary to issue certificates of complete refusal to land in two instances, one being a case of mental instability and the other a case of venereal disease. One alien suffering from Erysipelas was landed conditionally to his proceeding to a hospital approved of by the Medical Officer. Detailed information as to the inspection work carried out in the Port is set out in Table 32.

BATHING POOLS AND PURITY OF THE WATERS OF THE PORT.

The bathing pools on the foreshore are of two kinds:—

- (i) *Open Pools*, namely Needles, Tinside, Tin sheds, Promenade Pier, and certain stretches of beach under the Pier, at Rusty Anchor, Firestone Bay, Jennycliffe Bay, and Bovisand.

The water in these, being part of the flowing sea, is liable to gross pollution from near-by sewers when tide and wind so favour. The water is more or less pure sea-water, except on the last half of the ebb-tide, or when strong southerly winds prevail, where all but Bovisand Bay become filled with sewage.

- (ii) The second group consist of *Closed Pools*, into which clean water is admitted at high tide and held until the next high tide, thus avoiding contamination from the sewage effluents which are discharged into the ebbing tide. In this group are Mount Wise Baths, the Ladies' Basins and the Men's Basin.

The addition of chloride of lime to the water at Mount Wise is a further precaution. In the Summer, these baths are crowded with the inhabitants of Devonport, but even so the Colon Bacillus has never been found in less than 1 cubic centimetre of water.

Frequent (generally weekly) samples are taken of the waters along the foreshore and in the bathing pools. Bacillus Coli were occasionally found to be present in one-tenth of a cubic centimetre in certain pools, but in the main the presence of B. Coli could not be detected in 5 cubic centimetres of water.

OYSTERS.

Oysters grow in the estuary of the Tamar in natural beds extending over a considerable area. They are self-sown; self-supporting, not cultivated, nor protected in any way. For this reason they are easily affected by their environments, and their numbers and condition being dependent upon the favours of the seasons, the catch each year is subject to fluctuations.

A series of bad summers has reduced the catch to the present low figure of 20,000, and the overfishing that has been going on for the last few years has tended further to deplete the stock, even to the point of endangering the very existence of the beds.

The following figures show the serious decline which has occurred in recent years :—

150,000 oysters dredged in 1926.
100,000 oysters dredged in 1927.
60,000 oysters dredged in 1928.
47,000 oysters dredged in 1929.
20,000 oysters dredged in 1930.

In the month of February of each year the dredging is commenced and continued until Easter, as many oysters as possible being taken from the beds by the dredgers. They may not be sold to the public because the Tamar is grossly polluted with sewage, but are purchased by the Yealm Oyster Fisheries for replanting in the comparatively pure waters of the Yealm until ready for sale. There, approximately one-third die after relaying.

In 1927, Mr. Kingcome, Manager of the Yealm Oyster Fish-

eries, began the experiment of breeding and rearing his own oysters from spawn. The results were satisfactory, some 5,000 little oysters settling on the tiles in the tanks. These have continued to flourish.

In 1928, the attempt was repeated. Spawning female oysters were again placed in the tanks and presently the water was teeming with larval oysters swimming about vigorously, but nothing would induce them to settle on the limewashed tiles. That was a bad summer.

In 1929, no attempt was made here, but on the Mussel Farm at Lypstone, by Exmouth, it was done in March, and the spat settled on the tiles so thickly that by September they were growing over one another as large as shillings. These tiles were purchased and brought to the Yealm, where from June to September they were kept in the tanks and fed on cultures of algæ from Conway experimental station. In the September, the weather being still warm and suitable for relaying, it was decided to transfer them to wire cages in the open river. The mesh of these cages was three to the inch and the cages were supported on legs about one foot above the bottom, allowing free passage for water and food for the growing oysters, but too fine to permit entry of crabs. The Lypstone oysters transferred to the Yealm totalled 20,000, and some 7,000 still survive in December, 1930, but need fattening before putting on the market. The average diameter is now about two inches.

It is intended to replenish the depleted temporary stock. Some 250,000 oysters will be purchased from Falmouth next year to augment the diminished supply from the Tamar.

We note that the experiments conducted on oyster breeding by the Ministry of Agriculture and Fisheries at Conway and Lypstone are bearing encouraging results, particularly with regard to the part played by seaweed in the production of oyster food.

I am indebted to Mr. P. S. Bulleid, the Port Sanitary and Food Inspector, for the following reports on foodstuffs and the sanitary condition of the Port :—

SANITARY INSPECTION.

Quite 90 per cent of the vessels visited for Sanitary Inspection are between 100 and 1,000 registered tons. On this class of vessel, the most noticeable feature is the marked superiority in cleanliness and layout of crews' quarters of other Nationalities (mostly Scandinavian) in comparison with vessels of our own Country. The usual

accommodation for the crew of our own ships is in the fo'c'sle, which is divided into two compartments, one for firemen and one for seamen. Each compartment must answer the purpose of bathroom, bedroom, dining-room, sitting-room and sometimes kitchen. These quarters are mostly ill-lit and badly ventilated. Most of the Scandinavian and German vessels of the same size accommodate their crews aft, with separate cubicles for every two or three men. Separate ablutionary places are provided, and the quarters are better lit and ventilated. The general impression is cleanliness; this is accentuated by the liberal use of white paint and enamel with stained and varnished woodwork, which shows up the dirt and is therefore an incentive to cleanliness. In comparison, the average British ship is painted in dark colours, brown, dark green, and even black. As the quarters are also badly lit, cleanliness is not easily obtained.

Improvements in crews' quarters must effect better light and ventilation, with bathrooms and messrooms separated from sleeping quarters.

In dealing with the remedial of sanitary defects found to exist on board, I have in 28 cases issued verbal orders and seen the work carried out to my satisfaction. There were in addition 55 Informal Notices issued. The total number of defects was 314. In a few instances our requirements were not carried out at this Port owing to lack of time or convenience, and in such cases permission was given for repairs or other work to be carried out at the next or terminal ports. Advice was sent to the Port Medical Officers of the ports in question and we were ultimately advised by them on completion.

The following table is the classification of nuisances found :—

Nationality of Vessel.	Number Inspected during 1930.	Defects of original construction.	Structural defects through wear and tear.	Dirt, Vermin and other conditions prejudicial to Health.
British	1424	9	88	154
Other Nations ..	647	3	2	58
TOTAL ..	2071	12	90	212

Houseboats. There are many houseboats moored in the River Yealm, Stonehouse Pool, Hooe Lake, and along the foreshore of the Tamar river. These are used mostly for week-end and summer purposes ; whilst a few are permanently occupied. No fault can be found with the sanitary condition, although space is necessarily limited.

FOODSTUFFS.

PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1925.

During 1930 there were 707 vessels dealt with under the Public Health (Imported Food) Regulations, 1925 ; 364 being from foreign ports and 343 coastwise.

The principal landing places for foodstuffs are at Victoria Wharves, Great Western Docks and Sutton Harbour.

The chief ports with which we have trade, in addition to the shipping companies concerned, will be found in Table 38.

As far as possible, all foodstuffs landing are inspected, and a proportion given detailed examination where deemed necessary. Table 40 shows the varying nature of the foodstuffs found diseased, unsound, unwholesome, or unfit for human consumption during the year, which totalled over 340 tons. In one case only was any trouble experienced. A consignment of tinned meat arrived in the port of a brand usually found in perfect condition. On routine examination of one of the cases, several tins were found to be blown. The remainder of the cases were opened, and in all 77 tins were agreed upon by the Medical Officer of Health, the Assistant Medical Officer of Health, and myself as being blown and unfit for human consumption. The consignee refused to sign our usual Voluntary Surrender Notice, acting on instructions sent him by the senders, and we had no recourse but to obtain a Magistrate's Order for the destruction of the goods. This was acted upon. Subsequently, we were asked for our report by the Ministry of Health, to whom a complaint had been made by the senders. As the 77 tins were definitely unfit for human consumption and we had acted strictly in accordance with the principles laid down by law, the matter thereupon terminated.

Approximately two hundred tons of barley in the hold of the Italian motor vessel *Liri*, which arrived here from Nicolaieff on the 16th December, were sent on to Glasgow for disposal as the result of a leak in the oil containers in the vessel's double bottom.

About 50 per cent was definitely contaminated with oil, and the Receiver's Agent at Plymouth refused to accept the full amount. Samples of the best of the barley were sent to the Public Analyst, who reported "no pollution by oil."

The year 1930 was a poor one for the importation of strawberries and green peas from France. The season was very short, lasting from June 4th to June 29th, and with a landing of 2,285 tons. Since 1922, the total tonnage has only once been lower than this year, that being in 1925. There was a reduction of 1,080 tons in comparison with last year's figures.

PUBLIC HEALTH (PRESERVATIVES IN FOOD) REGULATIONS, 1925.

A sample of Dutch sausage was taken during the year and submitted to the City Analyst under these regulations. The result showed no trace of illegal preservatives.

MERCHANDISE MARKS ACT, 1926.

At the present time fresh apples, currants, sultanas, raisins, eggs, dried eggs, and oat products are required on importation to be plainly marked in a specified manner indicating the country of origin.

MISCELLANEOUS.

The outside of the hospital ship *Flamingo* has been painted, and the inside where thought necessary. The vessel is in good condition and makes no water. Her expected departure has not yet materialised. The vessel is to be sold early in 1931.

The motor launch *Clytie* has been thoroughly overhauled and repaired. Her moorings taken up, examined, repaired, tarred, and relaid.

The Ministry of Health have altered the quarterly form showing the particulars of Aliens landing and examined. This has necessitated substantial alterations in the Boarding Medical Officers' journal, which has been effected, and the new journal will be used from the 1st January, 1931.

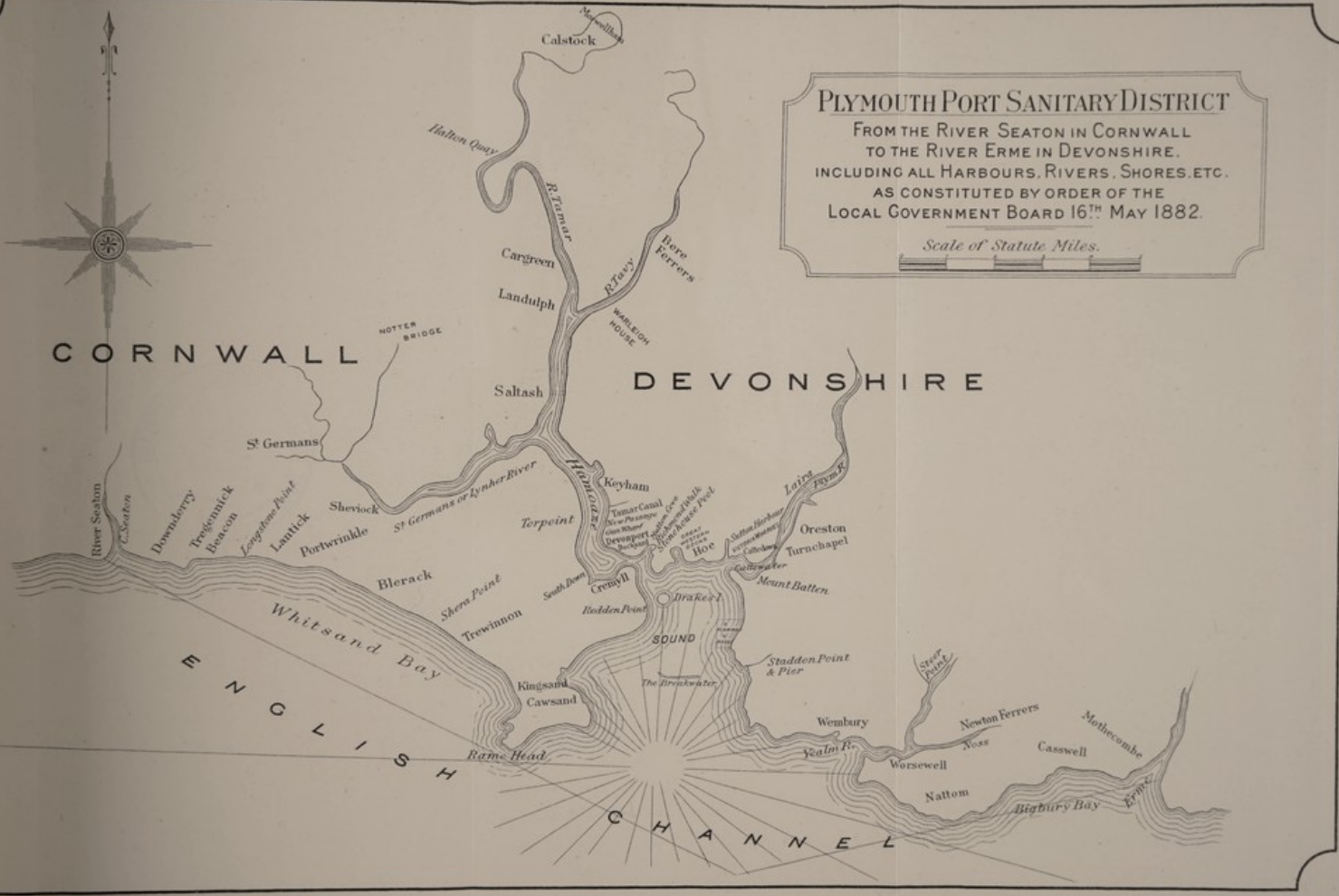


CORNWALL

DEVONSHIRE

PLYMOUTH PORT SANITARY DISTRICT
 FROM THE RIVER SEATON IN CORNWALL
 TO THE RIVER ERME IN DEVONSHIRE.
 INCLUDING ALL HARBOURS, RIVERS, SHORES, ETC.
 AS CONSTITUTED BY ORDER OF THE
 LOCAL GOVERNMENT BOARD 16TH MAY 1882.

Scale of Statute Miles.





LIST OF CHARTS.

- A. Vital Statistics in Wards for 1930.
 - B. Infant Mortality, 1915-1930.
 - C. Birth-rate, Death-rate and Rate of Natural Increase, 1915-1930.
 - D. Deaths from Cancer, 1891-1930—variations from the average incidence.
 - E. Tuberculosis—Weekly numbers in Institutions.
 - F. Deaths from Tuberculosis, 1891-1930—variations from the average incidence.
 - G. Attendances at Tuberculosis Dispensaries, 1920-1930.
-

CHART A.

VITAL STATISTICS IN WARDS FOR 1930.

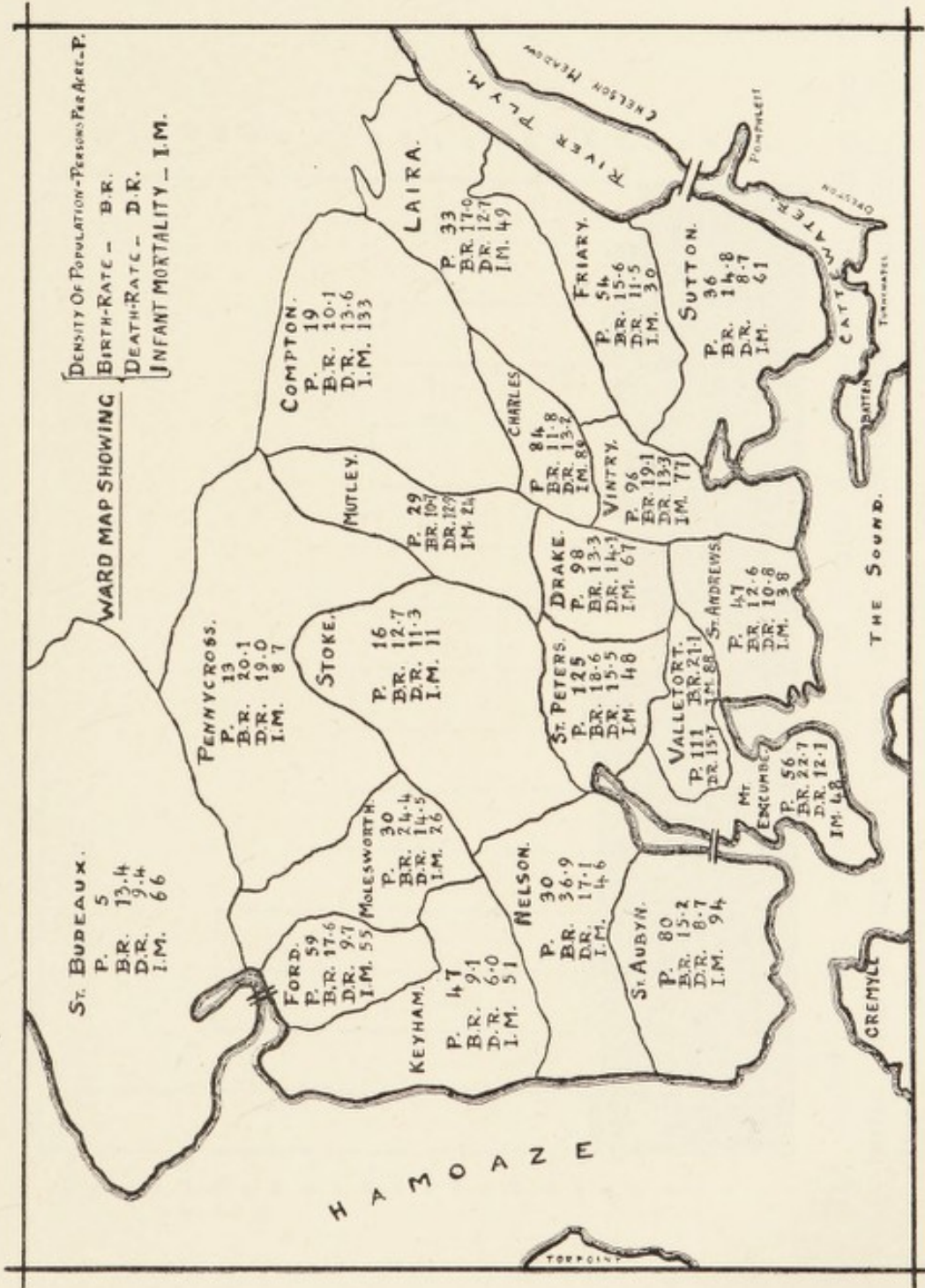
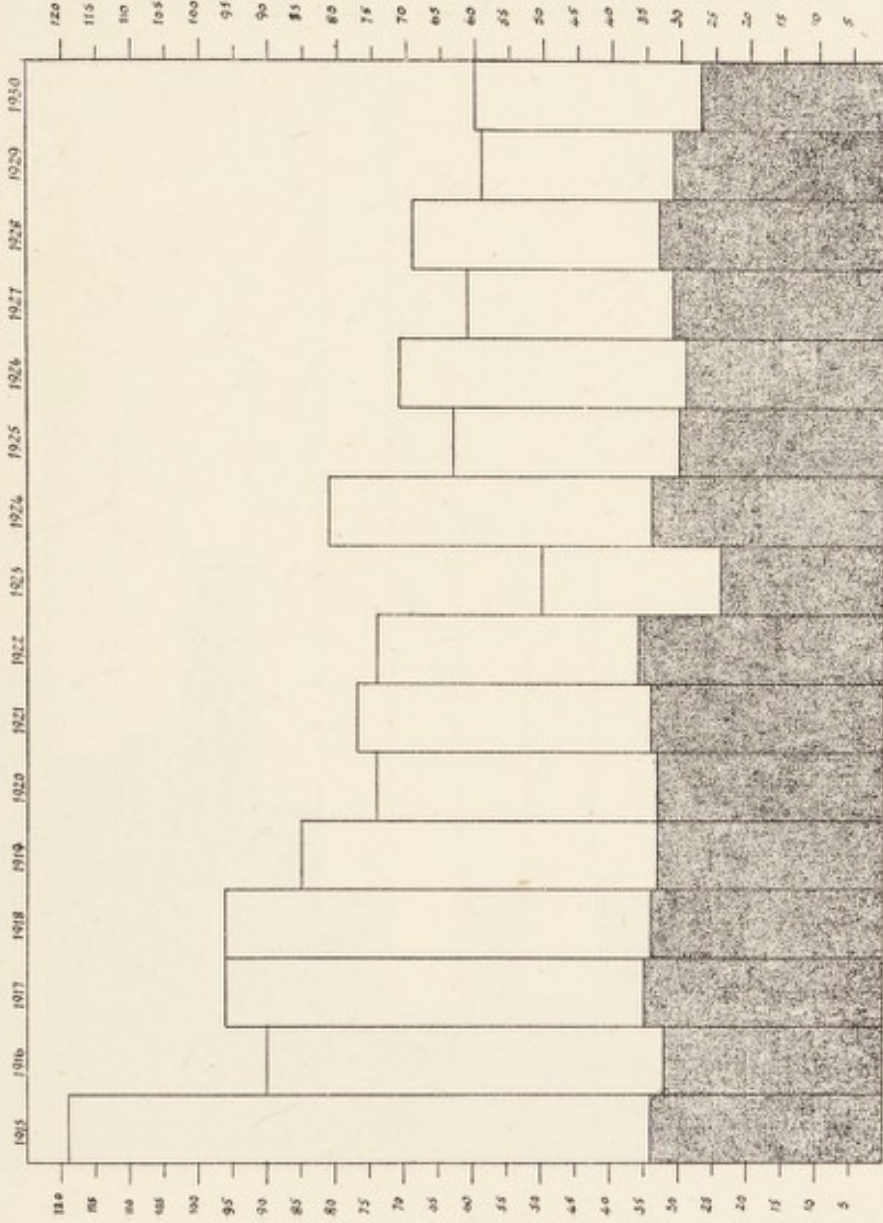


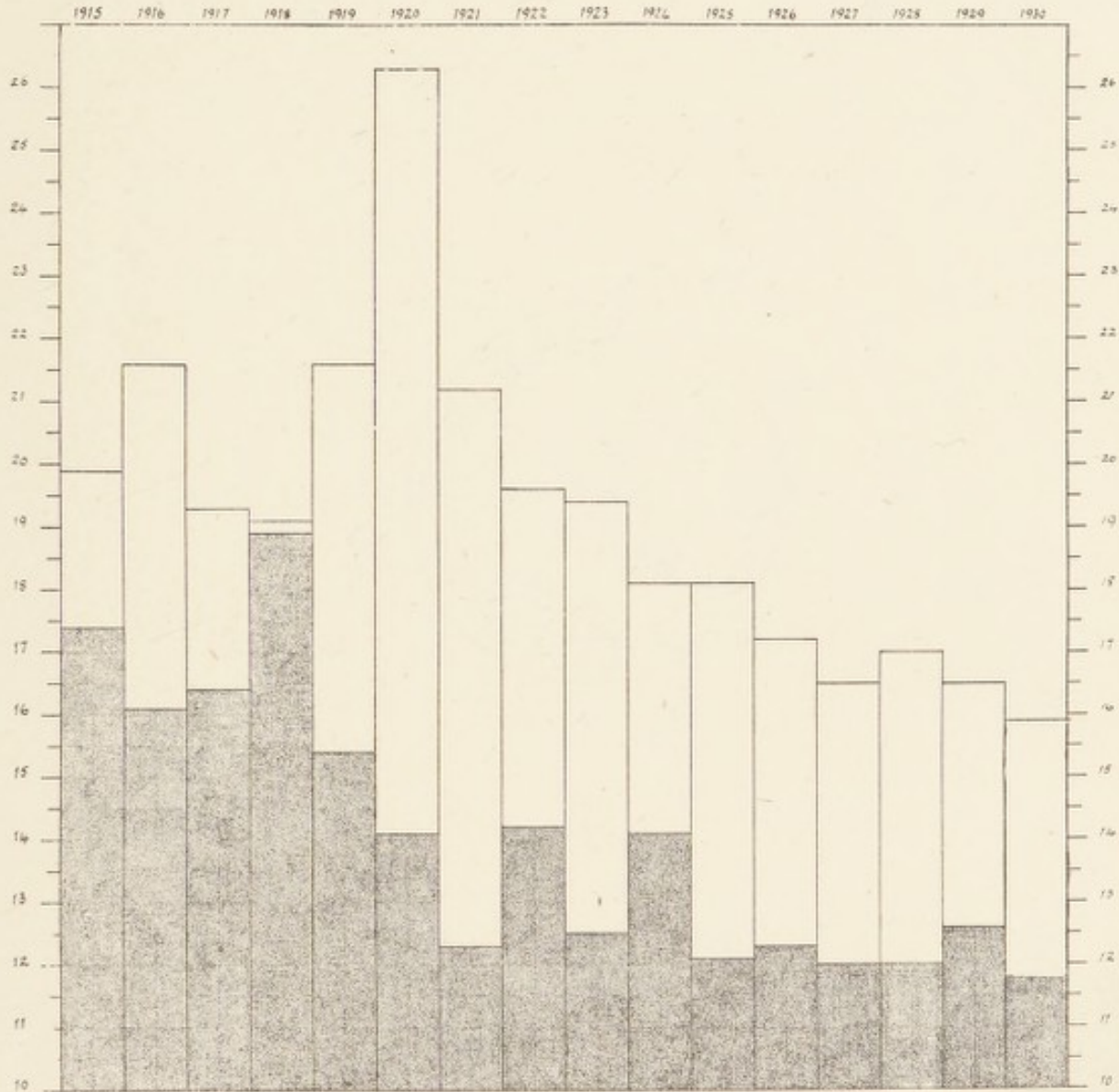
CHART B.

INFANT MORTALITY, 1915—1930.



NOTE : The shaded portion shows the number of Deaths due to ante-natal causes per 1,000 births; and the unshaded portion shows the Deaths due to post-natal influences. The total column shows the rate of infant mortality year by year.

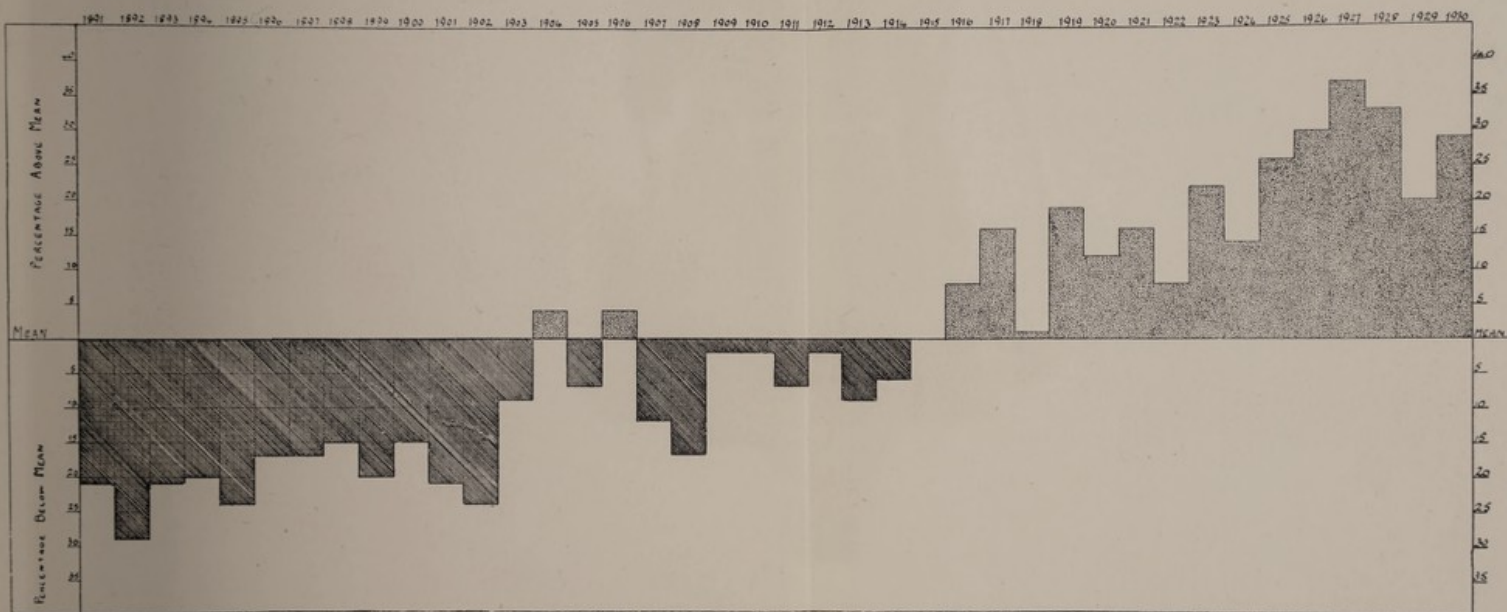
CHART C.
BIRTH-RATE, DEATH-RATE AND RATE OF
NATURAL INCREASE, 1915—1930.



NOTE: The Death-rates are shown by the shaded portion of the chart; the rate of natural increase by the unshaded columns; and the Birth-rate by the shaded *plus* the unshaded portions.

CHART D.

DEATHS FROM CANCER, 1891—1930.



This Chart shows the variations from the average of Cancer Deaths.

The considerable percentage increase during recent years should be noted.

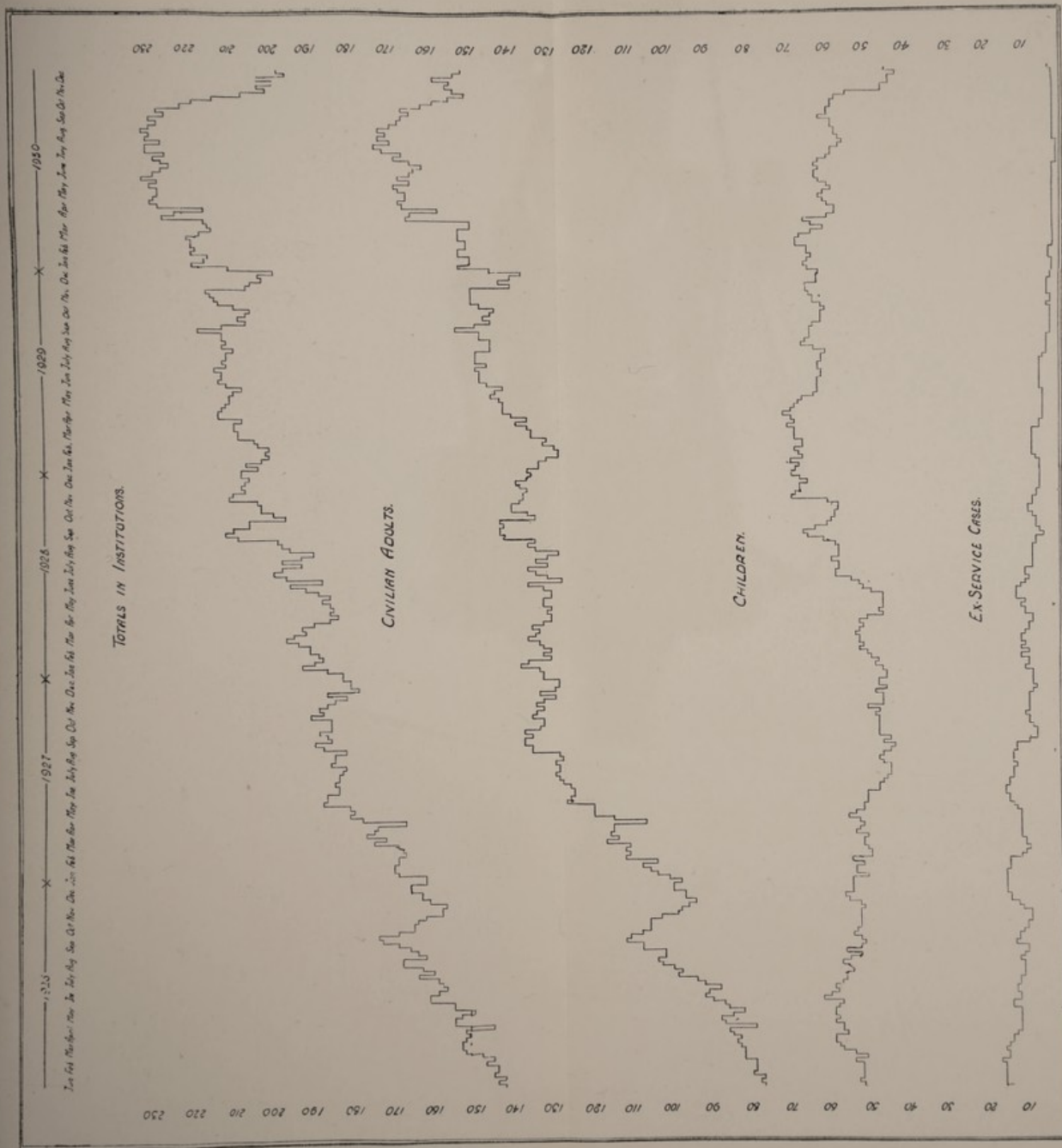
1870

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO
THE UNIVERSITY OF CHICAGO

TUBERCULOSIS

Chart showing weekly numbers and the classifications of Tuberculous persons in Institutions during 1926-1930.



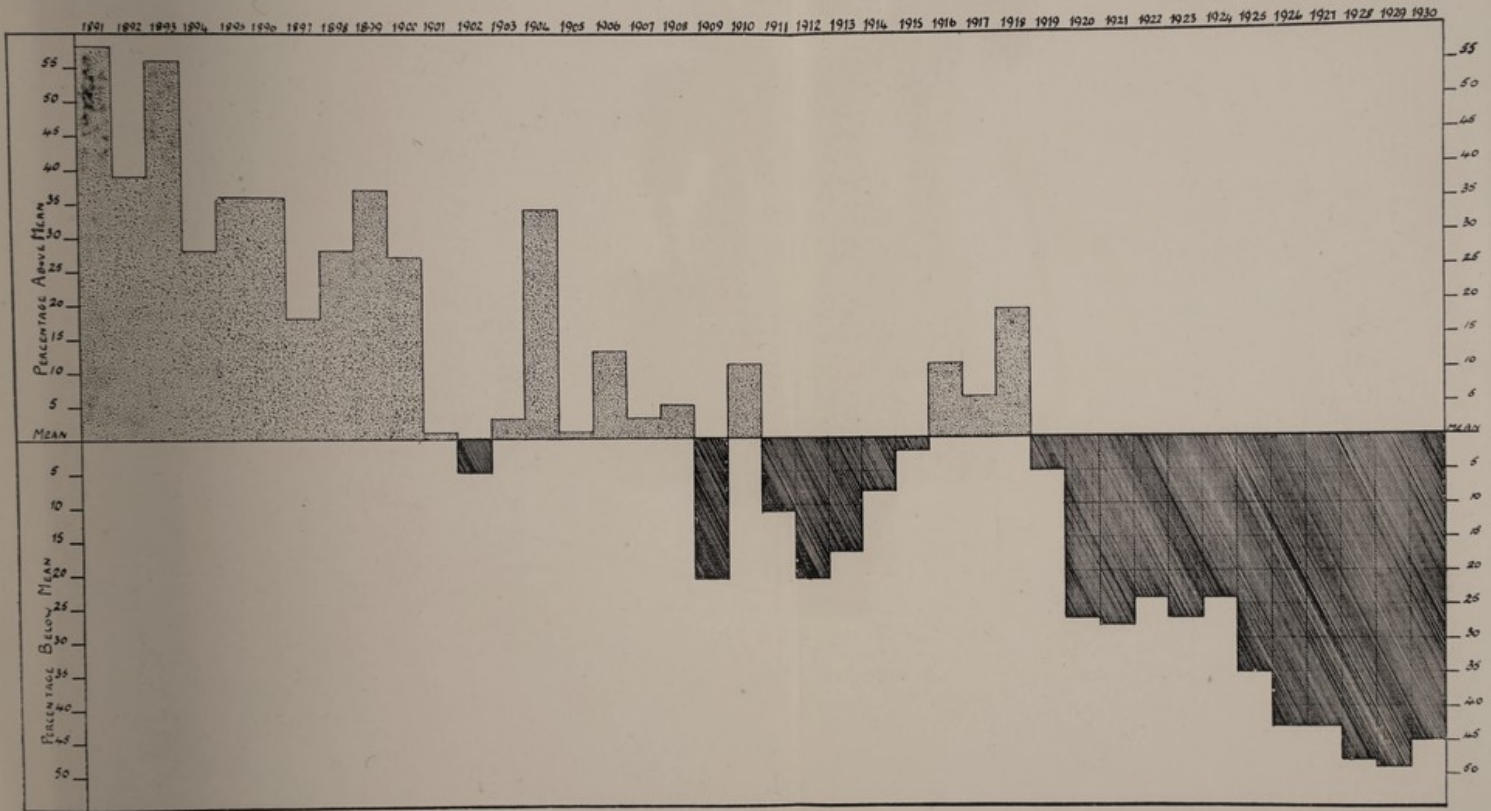
N.B.—The fall in the numbers of patients receiving institutional treatment from October, 1930, is due to the following causes:—

- (a) Clearing one Ward at Swilly Hospital to cope with the requirements for Scarlet Fever.
- (b) Clearing Girls' Block at Didworthy Sanatorium for re-building.
- (c) The Christmas seasonal drop.



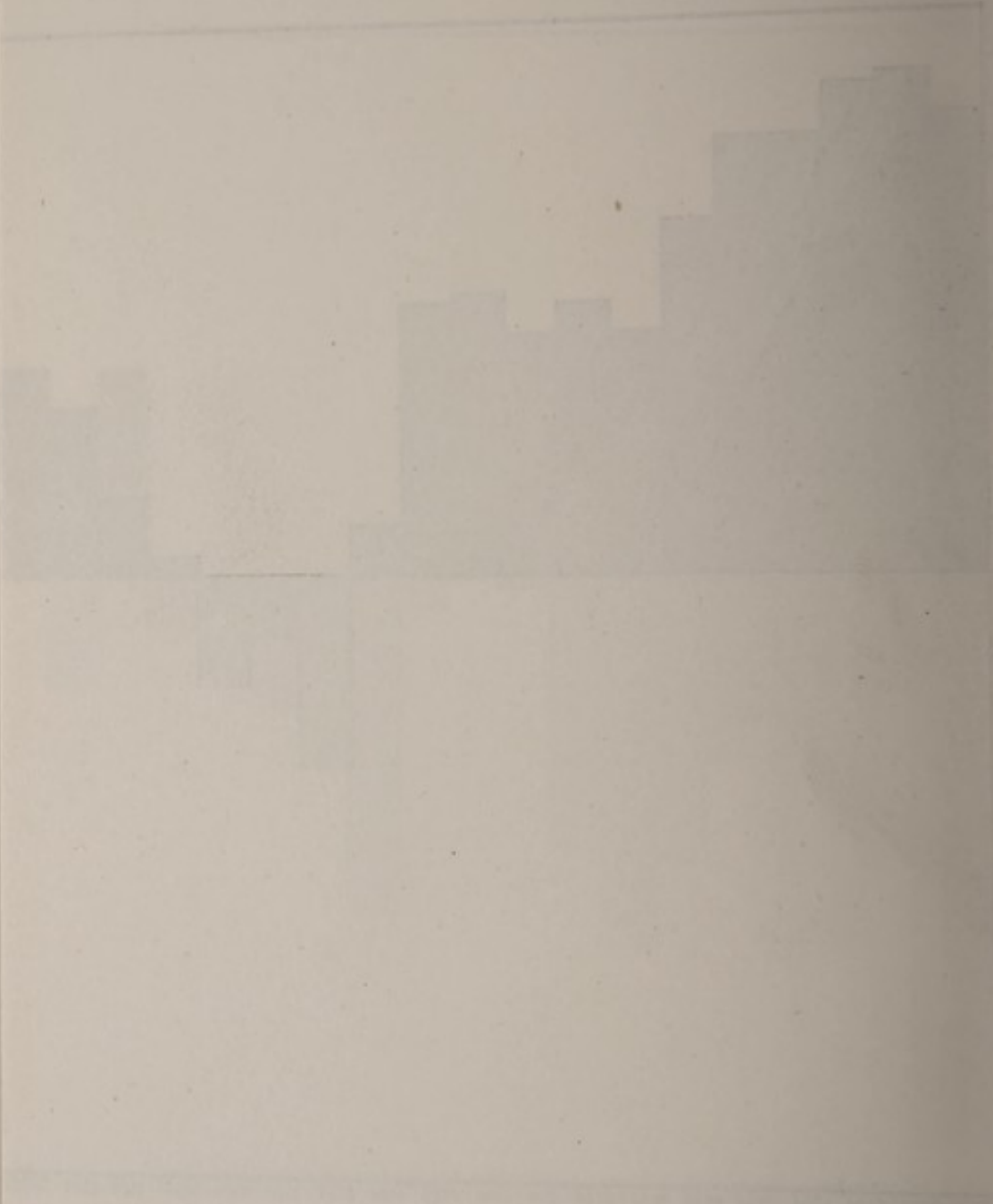
CHART F.

DEATHS FROM TUBERCULOSIS (All Forms) 1891—1930.



NOTE: This Chart shows the percentage variations of Tuberculosis Deaths from the average. The very marked percentage reduction of deaths from Tuberculosis during recent years should be noted.

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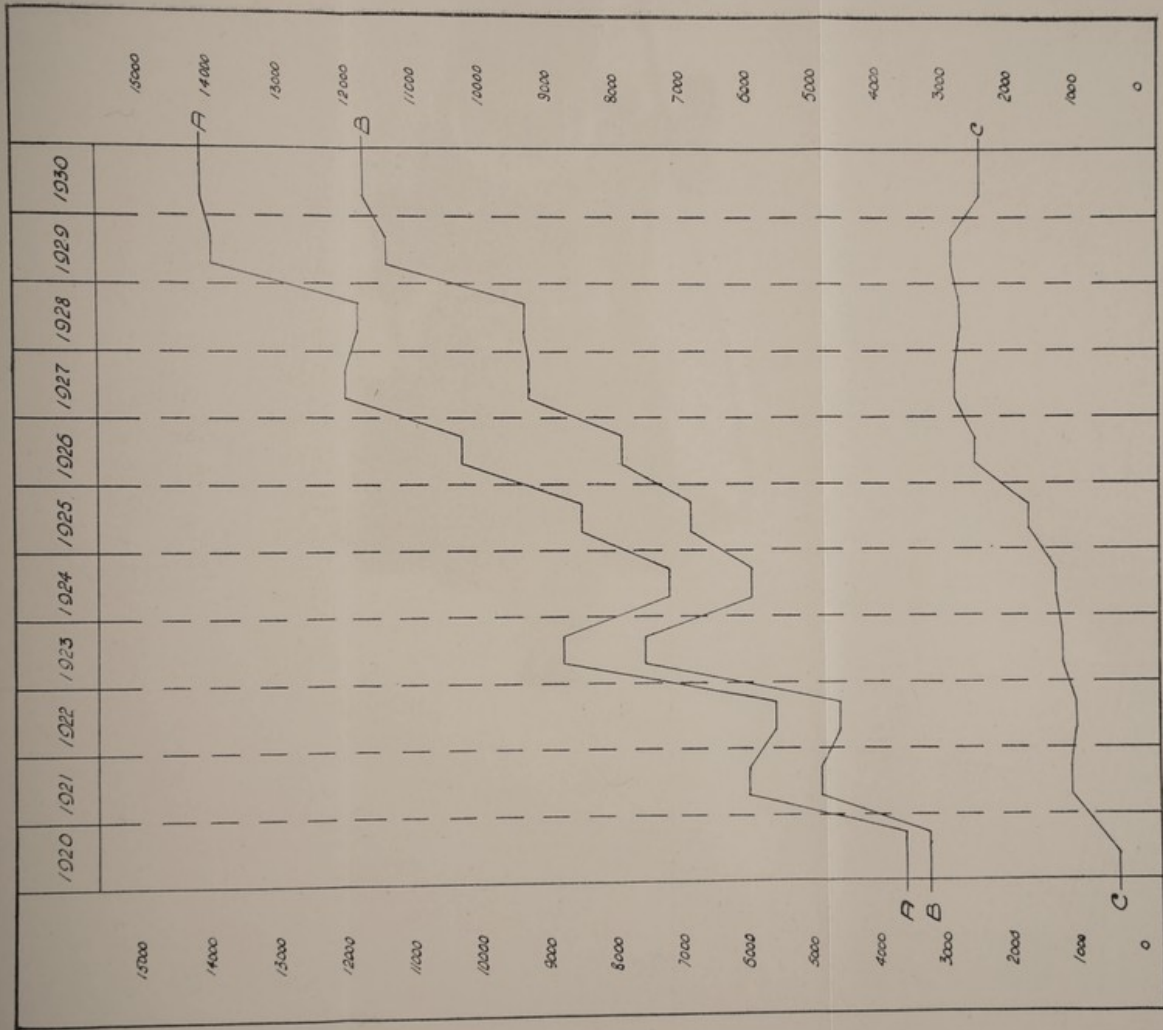
Vertical handwritten text on the right side of the page, possibly a list or index, which is mostly illegible due to fading.

Handwritten text at the bottom of the page, possibly a footer or concluding remarks, which is mostly illegible due to fading.

CHART G.

TUBERCULOSIS.

Chart showing attendances of Patients at Dispensaries.



KEY:

A—Total Attendances at Dispensaries.

B—Attendances at Beaumont House Main Dispensary.

C—Attendances at Royal Albert Hospital Sub-Dispensary.

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	„	5. Work done at Maternity and Child Welfare Centres, 1930.
	„	6. Supervision of Midwives.
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	„	11a.)
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TABLE 1.

PLYMOUTH VITAL STATISTICS, 1914—1930.

Year.	Estimated Mid-year population.	Birth-rate per 1,000 population.	Death-rate per 1,000 population.	Infant Mortality per 1,000 Births.
1914 ..	212,421	23.7	15.5	109
1915 ..	187,911	19.9	17.4	119
1916 ..	184,473	21.6	16.1	90
1917 ..	179,375	19.3	16.4	96
1918 ..	179,629	19.1	18.9	96
1919 ..	181,967	21.6	15.4	85
1920 ..	189,218	26.3	14.1	74
1921 ..	199,860	21.2	12.3	77
1922 ..	200,370	19.6	14.2	74
1923 ..	211,500	19.4	12.5	50
1924 ..	206,600	18.1	14.1	81
1925 ..	211,078	18.1	12.1	63
1926 ..	211,350	17.2	12.3	71
1927 ..	211,650	16.5	12.0	61
1928 ..	211,980	17.0	12.0	69
1929 ..	213,500	16.5	12.6	59
1930 ..	215,000	15.9	11.8	60
107 Great Towns during 1930 ..		16.7	11.5	64
159 Smaller Towns during 1930 ..		16.2	10.5	55
England and Wales during 1930 ..		16.3	11.5	60

The Total population estimated for the Year 1930, is 215,000.

The Civilian population, estimated by the Registrar General, is 199,000.

1853	511'200	18'4	15'2	20
1855	500'310	18'0	14'3	17
1857	480'200	17'3	13'3	14
1850	420'310	16'3	14'1	14
1810	421'001	11'0	12'4	82
1818	410'050	10'1	12'0	80
1811	410'312	10'3	10'4	80
1816	484'413	11'9	10'1	80
1812	421'011	10'0	11'4	110
1814	515'431	16'3 53'1	12'2	100
The X cent. The C.	Population during 1860 Population 1814-1860 Population 1814-1860	Population per 1'000 Population per 1'000 Population per 1'000	Population per 1'000 Population per 1'000 Population per 1'000	Per cent per cent per cent

ΒΡΥΧΙΟΝΤΗ ΑΙΛΥΤ ΣΤΑΤΙΣΤΙΚΗΣ 1814—1830.

TABLE 2.

DEATHS FROM ALL

Cause of Death	AGE DISTRIBUTION					Total
	AGE					
	10-14 years	15-24 years	25-34 years	35-44 years	45 years and upward	
Causes ill-defined or unknown	3	3	3	3	3	15
Other defined diseases	4	4	4	4	4	16
Other deaths from violence	2	1	1	1	1	6
Suicide	—	—	—	—	—	—
Infant, premature birth	—	1	—	—	—	1
Congenital debility and malformation	—	—	—	—	—	—
Pregnancy and parturition	—	—	—	—	—	—
Other accidents and diseases of	8	—	—	—	—	8
Puerperal sepsis	—	—	—	—	—	—
Acute and chronic hepatitis	—	—	—	—	—	—
Cirrhosis of liver	—	—	—	—	—	—
Apendicitis and typhitis	19	—	—	—	—	19
Diarrhea, etc. (under 2 years)	20	—	—	—	—	20
Ulcer of stomach or duodenum	24	—	—	—	—	24
Other respiratory diseases	10	—	—	—	—	10
Pneumonia (all forms)	107	19	—	—	—	126
Bronchitis	—	—	—	—	—	—
Artero-sclerosis	—	—	—	—	—	—
Heart disease	—	—	—	—	—	—
Cerebral hemorrhage, etc.	—	—	—	—	—	—
Diabetes	—	—	—	—	—	—
Rheumatic fever	—	—	—	—	—	—
Cancer, malignant disease	—	—	—	—	—	—
Other tuberculous diseases	—	—	—	—	—	—
Tuberculosis of respiratory system	107	4	—	—	—	111
Meningococcal meningitis	—	—	—	—	—	—
Encephalitis lethargica	—	—	—	—	—	—
Influenza	10	—	—	—	—	10
Diphtheria	21	—	—	—	—	21
Whooping Cough	4	—	—	—	—	4
Scarlet fever	8	—	—	—	—	8
Mumps	—	—	—	—	—	—
Measles	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—
Enteric fever	1	—	—	—	—	1
Totals	2,543	247	783	2,208	1,612	7,391

Death Rate 11.8.

INFANT MORTALITY

by age to every 1,000 live births

AGE	Total		Males		Females		Cause of Death
	No.	%	No.	%	No.	%	
Under 1 year	11	11.4	6	11.4	5	11.4	Total
1 year	1	1.0	1	1.0	0	0.0	Other Causes
2 years	1	1.0	1	1.0	0	0.0	Suffocation in bed or not stated how
3 years	1	1.0	1	1.0	0	0.0	Atelctasis
4 years	1	1.0	1	1.0	0	0.0	Injury at birth
5 years	1	1.0	1	1.0	0	0.0	Premature birth
6 years	1	1.0	1	1.0	0	0.0	Congenital debility and sclerosis
7 years	1	1.0	1	1.0	0	0.0	Congenital malformation
8 years	1	1.0	1	1.0	0	0.0	Diarrhea and enteritis
9 years	1	1.0	1	1.0	0	0.0	Pneumonia
10 years	1	1.0	1	1.0	0	0.0	Bronchitis
11 years	1	1.0	1	1.0	0	0.0	Convulsions
12 years	1	1.0	1	1.0	0	0.0	Meningitis
13 years	1	1.0	1	1.0	0	0.0	Syphilis
14 years	1	1.0	1	1.0	0	0.0	Other Tubercular Diseases
15 years	1	1.0	1	1.0	0	0.0	Whooping Cough
16 years	1	1.0	1	1.0	0	0.0	Measles
17 years	1	1.0	1	1.0	0	0.0	Cholera
18 years	1	1.0	1	1.0	0	0.0	Causes of Death
19 years	1	1.0	1	1.0	0	0.0	Maternal
20 years	1	1.0	1	1.0	0	0.0	Consumption

Total births belonging to the City
 Population—Estimated

TABLE 4.

Diagnosis	St. Peter's	Mount Adams	Mount Adams	Mount Adams	Mount Adams	Mount Adams	Mount Adams	Mount Adams	Mount Adams
Small-pox
Scarlet Fever
Diphtheria
Enteric or Typhoid
Pneumonia
Puerperal Fever
Puerperal Pyrexia
Cerebro-spinal Fever
Acute Poliomyelitis
Acute Polio-encephalitis
Encephalitis Lethargica
Dysentery
Ophthalmia Neonatorum
Erysipelas
Tuberculosis—Pulmonary
Non-Pulmonary
Malaria—Contracted Abroad
Chicken-pox
Infective Enteritis
Totals	681	99	82	1262	197	188			
Attack rate per 10,000 population	85.41	105.34	327.52	183.90	158				

Cases were admitted to Mount Gold Hospital from outside the City

Diagnosis	Disproved	Diagnosis	Disproved
Scarlet Fever	..	Scarlet Fever	..
Tonsillitis	..	Tonsillitis	..
Otorrhoea	..	Otorrhoea	..
Spontaneous abortion	..	Spontaneous abortion	..
Salmonella	..	Salmonella	..
Phympton	..	Phympton	..
Iybridge	..	Iybridge	..
Tavistock	..	Tavistock	..
Torpoint	..	Torpoint	..
Civilian cases from Crown Buildings	..	Civilian cases from Crown Buildings	..
Port Sanitary case	..	Port Sanitary case	..
R.A. Force	..	R.A. Force	..
Impetigo	..	Impetigo	..
Tonsillitis	..	Tonsillitis	..
Teething	..	Teething	..

MATERNITY AND CHILD WELFARE WORK DONE DURING THE YEAR 1930.

Nature of Work.	Town Hall, Stonehouse.	Beaumont Hall.	Devonport Park.	Walsley Hall.	Totals.					
	First visits.	Total visits.	First visits.	Total visits.	First visits.	Total visits.				
INFANT WELFARE—										
Number of Ante-natal Sessions held ..	94	89	104	50	337					
1st Attendances ..	253	223	210	82	768					
Re-attendances ..	813	811	533	211	2,368					
Post-natal ..	82	98	73	43	296					
Total ..	1,148	1,132	816	336	3,432					
Number of Sessions held ..	151	200	133	94	578					
Number of Babies entered on Register during year ..	769	621	563	269	2,262					
Children 1-5 ..	377	510	355	311	1,553					
Total ..	1,146	1,131	948	580	3,805					
Number of Babies seen by Doctor ..	2,473	3,212	2,191	1,353	9,829					
Number of Babies weighed ..	7,316	8,812	5,826	4,120	26,074					
Children Normal—general advice given	700	578	492	250	2,020					
Suffering from incorrect feeding ..	89	46	95	21	251					
Malnutrition ..	46	55	33	1	135					
Suffering from Rickets ..	101	14	30	17	162					
Suffering from Wasting ..	14	—	3	1	18					
Suffering from other minor ailments..	98	276	228	210	812					
Referred to own private doctors ..	27	54	17	26	126					
Referred to Hospitals ..	69	108	50	54	281					
Treated by Ultra-violet Rays— Sessions held ..	252	—	—	—	252					
1st Attendances ..	246	—	—	—	246					
Re-attendances ..	3,431	—	—	—	3,431					
Diphtheria Immunisation— Sessions held ..	52	—	29	—	81					
1st Attendances ..	493	—	298	—	791					
Re-attendances ..	1,802	—	514	—	2,316					
Health Talks given by Nurses ..	12	—	8	—	20					
Sewing parties held ..	89	98	27	—	214					
Mothers attending Sewing Classes ..	1,220	739	82	—	2,041					
INFANT LIFE PROTECTION—										
Visits paid by Nurses to expectant Mothers ..	31	190	111	216	82	280	75	139	—	825
Visits to Infants under one year ..	1,016	3,002	859	3,096	857	3,582	583	2,411	—	12,151
Visits to Children aged 1-5 years ..	76	3,198	30	4,660	30	4,636	26	3,246	—	15,740
Miscellaneous ..	—	461	—	294	—	471	—	168	—	1,394
Visits—Infectious Diseases ..	—	4	—	24	—	27	—	26	—	81
Total Visits paid by Nurses ..	—	7,005	—	8,927	—	9,091	—	6,942	—	39,565
Attendances at Clinics ..	—	1,024	—	587	—	444	—	254	—	2,309

Импрек од Всприе ассу рѣ Доктор ..	5'413	3'315	5'181	1'893	28'838
Children's Court ..	1'140	1'131	872	280	3'802
Субинг Спичиен I-24 feeding ..	311	210	322	311	1'223
.. ..	100	631	283	300	5'323
Импрек од Всприе ентрег од Регистар ..	90	50	55	1	186
Импрек од Сесиионс held ..	121	300	133	87	212
Субинг Ir-Lotus ..	1'182	1'125	216	336	3'435
Субинг Ir-Lotus ..	25	508	13	243	508
Ке-аттенданс ..	213	211	233	311	5'368
Ис-аттенданс ..	323	353	310	25	103
Импрек од Уни-уни Сесиионс held ..	84	120	107	20	331
ИЗДАНА МЕГЕНВЕТОЛЕТ Казн- Сесиионс held ..	252	---	---	---	252
1st Attendances ..	210	---	---	---	210
Учине од ИМОУ ..	Стомачне- Торакт Hull'	Нат Вентрион	Бат Дисомбом	Нат Мозефел	Доме
Дипитачна Имунисацн- ИВЛЕБИЛХ УИД СНИГД ..	493	---	---	---	81
1st Attendances ..	493	---	---	---	791

TABLE 6.

SUPERVISION OF MIDWIVES.

Supervision of Midwives—

Number of Midwives on Register	..	..	..	85
" " in Private Practise	..	..	..	30
" " attached to Nursing Homes..	..	..	..	55
Number of visits of inspection made	..	..	..	120
Number of Medical Help Forms sent by Midwives	..	..	..	870

Breaches of rules of the Central Midwives' Board :—

1. Lack of cleanliness in bags and appliances	..	..	..	2
2. Appliances broken or unfit for use	..	..	..	—
3. Lack of cleanliness in home	..	..	..	—
4. Failure to keep temperature records correctly	..	..	..	10
5. Failure to notify cases of discharging eyes	..	..	..	8
6. Failure to notify that Medical assistance was obtained..	..	..	..	—
7. Failure to notify that artificial feeding was advised	..	..	..	185

TABLE 3.
SHOWING THE AGE AND SEX OF DEATHS AND
NEW CASES OF TUBERCULOSIS—1930.

Age Periods.	Where Treated				Total blind- ness.	Vision im- paired.	Vision un- impaired.	New cases.	Deaths.					
	No. Notified.	Home.	Hospital (South Devon). In- patients	(Royal Eye Inflrmary). Out- patients					Pulmonary.	Non- pulmonary.	M.	F.		
0 to 1 year														
1 " 5 years														
5 " 10 "														
10 " 15 "														
15 " 20 "														
20 " 25 "														
25 " 35 "														
35 " 45 "														
45 " 55 "														
55 " 65 "														
65 and upwards														
TOTALS	43	33	4	1	5	40	1	1	1	22	11			

The death occurred from Marasmus.

Дне центр обследован по изгнанию

43	33	4	1	2	40	1	1	1
Монитор No	Home	Patients In (всего делов)	Patients Out- Hospital	Patients Out- Hospital (всего делов)	Patients In- Hospital	Patients In- Hospital	Patients Out- Hospital	Patients Out- Hospital
		Место лечения						
								Deaths

ОБЩЕСТВЕННАЯ ИСТОРИЯ, 1930

ТАБЛИЦА 1

TABLE 8.

SHOWING THE AGE AND SEX OF DEATHS AND
NEW CASES OF TUBERCULOSIS—1930.

Age Periods.	New cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0 to 1 year	—	—	1	1	—	—	1	—
1 „ 5 years	1	1	8	5	1	1	6	4
5 „ 10 „	1	1	10	3	—	1	3	1
10 „ 15 „	8	7	6	4	1	1	5	2
15 „ 20 „	15	19	4	10	1	11	1	1
20 „ 25 „	18	30	3	5	11	18	2	1
25 „ 35 „	29	37	2	7	23	24	—	1
35 „ 45 „	24	16	—	2	18	9	2	1
45 „ 55 „	20	9	1	1	23	8	1	—
55 „ 65 „	7	4	1	2	4	6	1	—
65 and upwards	4	1	—	—	4	2	—	—
TOTALS ..	133	125	36	40	86	81	22	11

TABLE 8.
SHOWING THE AGE AND SEX OF DEATHS AND
NEW CASES OF TUBERCULOSIS—1930.

Age Periods.	New cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0 to 1 year	—	—	1	1	—	—	1	—
1 " 5 years	1	1	8	5	1	1	6	4
5 " 10 "	1	1	10	3	—	1	3	1
10 " 15 "	8	7	6	4	1	1	5	2
15 " 20 "	15	19	4	10	11	1	1	1
20 " 25 "	18	30	3	5	11	18	2	1
25 " 35 "	29	37	2	7	23	24	—	1
35 " 45 "	24	16	—	2	18	9	2	1
45 " 55 "	20	9	1	1	23	8	1	—
55 " 65 "	7	4	1	2	4	6	1	—
65 and upwards	4	1	—	—	4	2	—	—
TOTALS ..	133	125	36	40	86	81	22	11

TABLE 9.
RETURN SHOWING THE WORK OF THE TUBERCULOSIS DISPENSARIES
DURING THE YEAR 1930.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.				
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—NEW CASES examined during the year (excluding contacts) :—													
(a) Definitely tuberculous	99	92	12	8	14	18	18	7	113	110	30	15	
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	51	76	33	33	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	63	86	25	26	
B.—CONTACTS examined during the year													
(a) Definitely tuberculous	—	2	1	—	1	3	1	—	1	5	2	—	
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	7	13	21	11	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	60	179	287	255	
C.—CASES written off the Dispensary Register as													
(a) Cured	9	9	4	5	4	6	9	5	13	15	13	10	
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ..	—	—	—	—	—	—	—	—	171	310	361	332	
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—													
(a) Diagnosis completed	377	326	113	96	45	47	56	38	432	373	169	134	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	17	23	9	7	

1. Number of persons on Dispensary Register on January 1st	1,186	9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	251
2. Number of patients transferred from other areas and of "lost sight of" cases returned	47	10. Number of consultations with medical practitioners :—	
3. Number of patients transferred to other areas and cases "lost sight of"	221	(a) At Homes of Applicants	59
4. Died during the year	136	(b) Otherwise	768
5. Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	15	11. Number of other visits by Tuberculosis Officers to Homes	444
6. Number of attendances at the Dispensary (including Contacts)	14,093	12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	12,734
7. Number of attendances of non-pulmonary cases at Orthopaedic out-stations for treatment or supervision	—	13. Number of Specimens examined :—	
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for :—		(a) Sputum	1,387
(a) Injections	1,066	(b) X-ray examinations made in connection with Dispensary work	37
(b) Larynx	292	14. Number of Insured Persons on Dispensary Register on the 31st December	478
		15. Number of Insured Persons under Domiciliary Treatment on the 31st December	187
		16. Number of reports received during the year in respect of Insured Persons :—	
		(a) Form G.P. 17	202
		(b) Form G.P. 36	179

TABLE 10.

(A) Average Number of Beds available for Patients during the Year 1930.

	Observation.	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis.		Total.
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints	Other Conditions.	
Adult Males	1	40	43	7	2	93
Adult Females	1	35	30	7	4	77
Children under 15	2	31	8	14	3	58
TOTAL	4	106	81	28	9	228

(B) Return showing the Extent of Residential Treatment during the Year 1930.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients ..	Adults	M.	78	128	90	29	87
		F.	60	105	80	19	66
	Children	M.	33	25	25	1	32
		F.	27	7	21	1	12
Number of Observation Cases	Adults	M.	—	5	4	—	1
		F.	1	2	3	—	—
	Children	M.	—	4	4	—	—
		F.	1	1	2	—	—
Total ..			200	277	229	50	198

TABLE 10.

(A) Average Number of Beds Available for

Pulmonary Tuberculosis	"Sanatorium" Beds	Observation	Total	
			Adult Males ..	Adult Females ..
4	40	1	.. 88	.. 89
3	35	1	.. 77	.. 78
	31	2	.. 85	.. 87
8	106	4	.. 250	.. 254

(B) Return showing the Extent of Residential

Admitted during the year.	Institutions on Jan. 1.	Institutions Dec. 31.		Number of Patients ..
		Adults	Children	
128	78	M.	Adults	} .. 135
105	60	F.	Adults	
25	33	M.	Children	
7	27	F.	Children	
5	—	M.	Adults	} .. 9
2	1	F.	Adults	
4	—	M.	Children	
1	1	F.	Children	
277	200	Total ..		

SANITARY INSPECTION OF PLYMOUTH 1930.

Visits to Premises	31,786
Tests applied to House Drains	3,418
Notices served to abate Nuisances	2,208
Notices complied with	2,206
Legal Notices served	165
Sanitary Improvements effected	8,612
Letters written	1,517
Houses systematically inspected	1,295

HOUSES LET IN LODGINGS.

Number of visits	15,742
Notices served	1,699
Notices complied with	1,736

Visits to premises in connection with Infectious Diseases	2,343
Premises disinfected	3,147
Articles disinfected	16,461

FOOD INSPECTIONS.

Number of Provision Shops inspected	3,292
Number of Fish Carts and Shops inspected	672
Number of Fruit Carts and Shops inspected	2,235
Amount of Food considered unfit and surrendered to District Inspectors .. 10 tons 13 cwt. 2 qrs. 9 lbs.	
Number of Samples procured under the Food and Drugs Adulteration Act	1,167
Number of Samples found adulterated	46
Inspection of Dairies, Cowsheds and Milkshops	3,214
Inspection of Butcher Shops	2,511

FACTORY AND WORKSHOP ACT.

Inspections of Bakehouses	101
" Workshops	680
" Factories	294
" Outworkers' Premises	152
Notices and Letters sent <i>re</i> defects	62
Inspections of Slaughterhouses	3,415

GENERAL SANITARY WORK EFFECTED.

Number of Drains re-laid or repaired	726
Choked drains cleared	428
Soil pipes and Ventilating Shafts fixed or repaired	345
Stoneware Gully Traps fixed	686
New Water-closet Pans fixed	596
Inspection Chambers constructed	282
Flush Cisterns fixed or repaired	499
New Closets and Urinals provided	221
Surface of Courtyards, etc., re-laid or repaired	666
Refuse Bins provided	563
Premises cleaned and limewashed or papered	755
Roofs and Flats repaired	717
Foul Closets cleaned	146
Overcrowding abated	14
Offensive Manure removed	170
New Ground Floors laid and ventilated	165
Slate Tanks abolished	30
Eaves Gutters and Fall Pipes repaired	388
Wall Drains and Cesspits destroyed	12
Nuisances (caused by keeping of animals) abated	30
Other Sanitary Improvements	1,173
TOTAL	8,612

RATS AND MICE (DESTRUCTION) ACT, 1919.

The following represents the work carried out under the above Act during 1930.

Premises visited and re-visited	1,558
Baits laid	14,900
Rats destroyed	1,590

Итого всего	3,532
Импорт из-за границы	670
Импорт из-за границы	3,502
Импорт из-за границы	40
Импорт из-за границы	10,401
Импорт из-за границы	3,147
Импорт из-за границы	3,343
Импорт из-за границы	101
Импорт из-за границы	1,130
Импорт из-за границы	1,000
Импорт из-за границы	12,142
Импорт из-за границы	62
Импорт из-за границы	1,302
Импорт из-за границы	1,011
Импорт из-за границы	2,015
Импорт из-за границы	183
Импорт из-за границы	3,300
Импорт из-за границы	3,302
Импорт из-за границы	3,418
Импорт из-за границы	31,180
Импорт из-за границы	282
Импорт из-за границы	402

TABLE 13.

SAMPLES TAKEN UNDER THE FOOD AND DRUGS ADULTERATION ACT.

Article.	Official.		Informal.		Totals.
	Genuine.	Adulterated.	Genuine.	Adulterated.	
Almond Icing ..	—	—	1	—	1
Baking Powder ..	—	—	6	—	6
Beer ..	—	—	4	—	4
Boric Ointment ..	—	—	5	—	5
Brandy ..	1	—	7	1	9
Butter ..	49	—	37	—	86
Camphorated Oil ..	—	—	5	—	5
Candied Peel ..	—	—	7	—	7
Castor Oil ..	—	—	7	—	7
Cheese ..	—	—	7	—	7
Chocolate ..	—	—	4	—	4
Cider ..	—	—	3	—	3
Cocoa ..	—	—	7	—	7
Coffee ..	—	—	7	—	7
Coffee and Chicory Essence ..	—	—	4	—	4
Condensed Milk ..	—	1	9	1	11
Cream ..	30	—	42	—	73
Mustard ..	—	—	7	—	7
Castard Powder ..	—	—	11	—	11
Dried Fruits ..	—	—	2	—	2
Dried Milk ..	—	—	7	—	7
Dripping ..	—	—	5	—	5
Egg Powder ..	—	—	7	—	7
Flour ..	—	—	—	—	—
Gin ..	3	1	—	—	4
Glycerine ..	—	—	4	—	4
Ground Almonds ..	—	—	4	—	4
Hogs Puddings ..	—	—	6	—	6
Honey ..	—	—	5	—	5
Iodine ..	—	—	4	—	4
Jams ..	—	—	14	—	14
Lard ..	4	—	2	—	6
Lemonade ..	—	—	3	—	3
Malt Vinegar ..	—	—	2	—	2
Margarine ..	—	—	7	—	7
Marmalade ..	—	—	6	—	6
Meat and Fish Paste ..	—	—	8	—	8
Mince Meat ..	—	—	6	—	6
Mustard ..	—	—	4	—	4
Olive Oil ..	—	—	7	—	7
Pepper ..	—	—	6	—	6
Pickles ..	—	—	4	—	4
Raspberry Cordial ..	—	—	1	—	1
Raw Milk ..	586	28	59	1	674
Rum ..	4	4	5	3	16
Saffron ..	—	—	3	—	3
Sauce ..	—	—	8	—	8
Sausages ..	—	—	18	—	18
Self-raising Flour ..	—	—	6	—	6
Skimmed Milk ..	16	3	4	—	23
Sterilised Milk ..	—	—	1	—	1
Sultanas ..	—	—	4	—	4
Sweet Spirits of Nitre ..	1	—	3	1	5
Tea ..	—	—	9	—	9
Vinegar ..	—	—	5	—	5
Whisky ..	2	—	—	1	3
	696	37	425	9	1,167

TABLE 14.

UNSOOUND MEAT DESTROYED DURING THE YEAR 1930.

DISEASE.	CARCASSES.				ORGANS.							
	Beef.	Veal.	Mutton.	Pork.	Lungs.	Hearts.	Livers.	Kidneys.	Heads. Tongues.	Spleens.	Mesen- teries.	Stomachs.
Tuberculosis	159	4	—	37	1,042	957	669	246	2,917	404	446	382
Actinomycosis	—	—	—	—	—	—	—	—	96	—	—	—
Pyæmia	—	3	4	1	20	14	42	4	2	1	1	1
Abscess	—	—	2	—	72	30	175	7	54	9	7	8
Emaciation	49	—	18	2	52	52	52	73	52	49	49	49
Dropsy	103	31	163	25	211	207	213	175	273	137	160	157
Erysipelas	—	—	—	1	—	—	—	—	—	—	—	—
Pneumonia	—	—	2	2	51	36	—	—	—	1	1	1
Septicæmia	16	12	30	6	48	48	47	43	45	29	27	27
Pericarditis	5	—	6	—	27	27	—	—	14	9	8	8
Pleurisy	—	—	—	1	4	4	—	—	1	—	1	—
Angioma	—	—	—	—	—	—	275	—	—	—	—	—
Foetal Flesh	—	3	—	—	3	3	3	6	3	3	3	3
Decomposition	6	8	21	17	92	92	73	159	49	8	6	6
Flukes	—	—	—	—	—	—	256	—	—	—	—	—
Cirrhosis	—	—	—	—	—	—	1,448	—	—	—	—	—
Black Quarter	1	—	—	—	1	1	1	2	1	1	1	1
Necrosis	—	—	—	—	—	—	—	—	—	—	—	—
Inflammation	8	12	9	6	138	96	143	68	37	39	36	34
Red Water	8	2	—	—	43	45	46	84	27	29	26	23
Cysts	—	—	—	—	7	—	34	8	—	—	—	—
Suffocation	—	—	—	—	—	—	—	—	—	—	—	—
Swine Fever	—	—	—	—	—	—	—	—	—	—	—	—

The number of Animals slaughtered in the City for the year was 35,763 made up as follows:—
 Bovines, 10,385, Sheep and Lamb, 23,381, Calves, 592, and Pigs, 1,405.

TABLE 14.
 1930. HART'S UNSOUND MEAT.

DISEASES	CARCASSES			
	Beef	Pork	Other	Total
Tuberculosis	159	4	—	163
Actinomycosis	—	—	—	—
Pyæmia	—	3	4	7
Abscess	—	—	2	2
Emaciation	49	—	18	67
Dropsy	103	31	163	297
Erysipelas	—	—	—	—
Pneumonia	—	—	2	2
Septicæmia	16	12	30	58
Pericarditis	5	—	—	5
Pleurisy	—	—	—	—
Angioma	—	—	—	—
Fœtal Flesh	—	3	—	3
Decomposition	6	8	21	35
Flukes	—	—	—	—
Cirrhosis	—	—	—	—
Black Quarter	1	—	—	1
Necrosis	—	—	—	—
Inflammation	8	12	9	29
Red Water	8	2	—	10
Cysts	—	—	—	—
Suffocation	—	—	—	—
Swine Fever	—	—	—	—

The number of Animals slaughtered
 5041, Beef 10,385, Sheep

UN SOUND FOOD DESTROYED.

The number of shops and carts inspected was 8,710.
 Quantity surrendered to District Sanitary Inspectors, and
 destroyed:—

FRUIT			
	Tons	cwt.	qrs.
	lbs.		
Apples	0	2	2
Cherries	0	2	2
Figs	0	0	4
Grapes	2	1	12
Oranges	1	1	0
Plums	0	5	8
Prunes	0	0	4
Raspberries	0	0	10
Tomatoes	0	0	10
VEGETABLES—			
Broccoli	0	10	0
Carrots	0	10	2
Greens	0	12	0
Potatoes	1	7	0
PROVISIONS—			
Beef	0	4	0
Cheese	0	1	2
Mussels	0	1	0
Oil	0	0	17
Pork	3	7	0
Prawns	0	0	20
Veal	0	0	2

TINNED GOODS—

Beef	93 tins
Cherries	1 tin
Chicken and Tongue	12 tins
Loganberries	5 "
Pineapple	19 "
Tongues	33 "

TABLE 16.

Factories, Workshops and Workplaces.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors.

<i>Premises.</i> (1)	<i>Number of</i>		
	<i>Inspections.</i> (2)	<i>Written Notices.</i> (3)	<i>Occupiers prosecuted.</i> (4)
FACTORIES (Including Factory Laundries)	294	39	—
WORKSHOPS (Including Workshop Laundries)	718	64	—
WORKPLACES (Other than Outworkers' premises)	—	—	—
Total	1,012	103	—

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

<i>Particulars.</i> (1)	<i>Number of Defects.</i>			<i>Number of offences in respect to which Prosecutions were instituted.</i> (5)
	<i>Found.</i> (2)	<i>Remedied.</i> (3)	<i>Referred to H.M. Inspector.</i> (4)	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	61	66	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	21	24	—	—
Sanitary accommodation { insufficient	10	11	—	—
{ unsuitable or defective	34	34	—	—
{ not separate for sexes	10	11	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Other offences	—	—	—	—
Total	136	146	—	—

TABLE 17.

HOUSING STATISTICS, 1930.

Number of new houses erected during the year :

(a) Total (including numbers given separately under (b))	318 & 24 flats
(b) With State assistance under the Housing Acts:	
(i.) By the Local Authority	43 & 24 flats
(ii.) By other bodies or persons	275

1. UNFIT DWELLING-HOUSES.

Inspection—

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ..	1,589
(2) Number of dwelling-houses which were inspected and recorded under the Housing Consolidated Regulations, 1910, or the Housing Consolidated Regulations, 1925, and Housing Act, 1930	296
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	31
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ..	265

2. REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	11
---	----

3. ACTION UNDER STATUTORY POWERS.

A.—Proceedings under section 3 of the Housing Act, 1925, and section 17, of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..	260
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	190
(b) By Local Authority in default of owners ..	1
(c) By Local Authority with consent of owners ..	7
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ..	Nil.

B.—Proceedings under Public Health Acts.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	2,373
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By Owners	2,266
(b) By Local Authority in default of owners ..	7

C.—Proceedings under sections 11, 14 and 15 of the Housing Act, 1925, and sections 19 and 20 of the Housing Act, 1930 :

(1) Number of representations made with a view to the making of Closing Orders	29
(2) Number of dwelling-houses in respect of which Closing Orders were made	31
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	19
(4) Number of dwelling-houses in respect of which Demolition Orders were made	42
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	17
(6) Number of dwelling-houses in respect of which Closing and Demolition Orders have been determined, the dwelling-houses having been rendered fit	7

TABLE II.
HOUSING STATISTICS, 1930.

Number of new houses erected during the year:
 (a) Total (including numbers given separately under (b)) 318 & 24 flats
 (b) With State assistance under the Housing Acts:
 (i) By the Local Authority 43 & 24 flats
 (ii) By other bodies or persons 275

1. UNFIT DWELLING-HOUSES.

Inspection—
 (1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .. 1,589
 (2) Number of dwelling-houses which were inspected and recorded under the Housing Consolidated Regulations, 1925, and 1910, or the Housing Consolidated Regulations, 1925, and Housing Act, 1930 .. 296
 (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. 31
 (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. 265

2. REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers .. 11

3. ACTION UNDER STATUTORY POWERS.

A.—Proceedings under section 3 of the Housing Act, 1925, and section 17 of the Housing Act, 1930:
 (1) Number of dwelling-houses in respect of which notices were served requiring repairs .. 260
 (2) Number of dwelling-houses which were rendered fit after service of formal notices:—
 (a) By owners .. 190
 (b) By Local Authority in default of owners .. 1
 (c) By Local Authority with consent of owners .. 7
 (3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close .. Nil
 B.—Proceedings under Public Health Acts:
 (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. 2,373
 (2) Number of dwelling-houses in which defects were remedied after service of formal notices—
 (a) By Owners .. 2,266
 (b) By Local Authority in default of owners .. 7
 C.—Proceedings under sections 11, 14 and 15 of the Housing Act, 1925, and sections 19 and 20 of the Housing Act, 1930:
 (1) Number of representations made with a view to the making of Closing Orders .. 29
 (2) Number of dwelling-houses in respect of which Closing Orders were made .. 31
 (3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit .. 19
 (4) Number of dwelling-houses in respect of which Demolition Orders were made .. 42
 (5) Number of dwelling-houses demolished in pursuance of Demolition Orders .. 17
 (6) Number of dwelling-houses in respect of which Closing and Demolition Orders have been determined, the dwelling-houses having been rendered fit .. 7

BACTERIOLOGICAL LABORATORY WORK DONE DURING THE YEAR 1930.

COMPARATIVE COSTS OF HOSPITAL SERVICES.

Disease.	Hospital.	Medical Practitioners.	T.B. Department.	School Medical.	M.O.H.	P.M.O.	Total.
Diphtheria ..	5,708	1,173	83	1,947	472	—	9,383
Tuberculosis ..	91	521	1,387	—	—	—	1,999
Enteric ..	13	10	—	—	—	—	23
Cerebral-Spinal Fluid ..	37	6	—	—	—	—	43
Ringworm ..	—	—	—	100	1	—	101
Milks ..	—	—	—	—	1,222	—	1,222
Water (Tap) ..	—	—	—	—	14	7	21
Rats ..	—	—	—	—	24	161	185
Urines ..	80	15	37	—	9	1	141
Faeces ..	7	—	11	—	—	—	8
Animal Inoculations ..	—	—	—	—	11	—	11
Lochia ..	42	7	—	—	—	—	49
Oysters ..	—	—	—	—	—	18	18
Hair for Spores ..	—	—	—	—	—	—	6
Cream ..	—	—	—	5	1	—	6
Ice Cream ..	—	—	—	—	23	—	23
Others ..	—	—	—	—	67	—	67
Sea Water ..	53	7	6	—	1	1	68
Bio Chemical ..	—	—	—	—	51	157	208
Blood Counts ..	13	—	—	—	—	—	13
Histology ..	5	—	—	—	—	—	5
Faeces for Occult Blood ..	11	—	—	—	—	—	11
Totals ..	6,075	1,739	1,514	2,052	1,896	345	13,620

Topic	0'012	1'339	1'214	5'025	1'200	342	13'650
Feces for Occult Blood	12						12
Histology	11						11
Blood Counts	2						2
Bio Chemical	13						13
Spec Matter					21	127	508
Others	23	1	6		1	1	98
Ice Cream					67		67
Cream					53		53
Hair for Spores				2	1		6
Oysters						18	18
Goshis	43	1					44
Animal Inoculations					11		11
Feces	1		1				2
Urine	20	12	37		0	1	141
Kids					54	101	182
Mater (Lab)					14	7	51
Milk					1,555		1,555
Kingdom				100	1		101
Cerebral-Spinal Fluid	37	6					43
Uteric	13	10					53
Luperculosia	61	251	1,387				1,800
Diphtheria	2,708	1,173	83	1,047	475		6,323
Disease	Hospital	Branchionals Medical	Department L.B.	School Medical	M.O.H.	B.W.O.	Total

RUSSIAN BACTERIOLOGICAL LABORATORY WORK DONE DURING THE YEAR 1930

TABLE 19.

COMPARATIVE COSTS OF HOSPITAL SERVICES.

Name of Institution.	Number of beds.	Average number occupied.	Average length of waiting list.	Average cost of patient per week (excluding loan charges).	Number of Staff.		
					Nursing.	Other.	Total.
South Devon and East Cornwall Hospital	240	212	150	£ s. d.	89	70	159
Royal Albert Hospital ..	60	57	33	2 10 0	29	26	55
Central Hospital ..	50	43	7	2 7 3	18	10	28
Royal Eye Infirmary ..	28	12	4	2 10 9	6	9	15
Three Towns Nursing Association	22	15	—	2 7 0	11	4	15
Alexandra Maternity Home ..	17	12	—	4 4 0	22	11	33
Dame Hannah Rogers' Hospital	24	24	11	1 19 8	7	11	18
City Hospital ..	552	465	—	1 13 11½ ¹⁹³⁰	107	66	173
Ford House ..	429	340	—	0 18 4	18	21	39
Stonehouse Institution	44	20	—	2 2 3½	—	5	5
Mount Gold Hospital ..	80	66	—	2 13 8	19	19	38
Swilly Hospital ..	66	55	—	2 10 2	11	12	23
Udal Torre Sanatorium ..	39	39	5	2 15 9½	5	16	21
Didworthy Sanatorium ..	90	90	6	2 14 5½	9	33	42
Smallpox Hospital ..	20	—	—	—	—	2	2

Name of Institution	No. of Patients	No. Occupied	Avg. length of stay	Total charges (excluding per diem)	Avg. cost of patient	Staff	
						Wages	Other
Swallow Hospital	50	—	—	—	—	—	5
Dimitroff Sanatorium	30	30	6	5 14	2 1/2	0	33
Udal Loma Sanatorium	30	30	2	5 12	3 1/2	2	10
Smilya Hospital	66	22	—	5 10	5	11	15
Molny Cold Hospital	90	68	—	5 13	8	10	10
Stonerope Institution	44	50	—	5 5	3 1/2	—	2
Lord House	450	340	—	0 12	4	12	51
City Hospital	225	462	—	1 13	11 1/2	101	60
Denne Hansen Kogels Hospital	54	54	11	1 10	2	7	11
Alexandra Maternity Home	11	15	—	4 4	0	55	11
Uree Loma Nursing Association	35	12	—	5 7	0	11	4
Kolya Ede Infirmary	38	15	4	5 10	0	0	0
Central Hospital	20	43	7	5 7	3	12	10
Kolya Alrech Hospital	60	27	33	5 10	0	50	50
South DeLeon and East Commercial Hospital	540	515	120	5 10	0	80	50
				7 2	9		50
							120

СОМЪКУЛИАЕ СОСТАВЪ ОЪ НОСЫЛЪТЪ СЕРВИСЕЪ.

TABLE 21.

ELEMENTARY SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

TABLE 20.

ELEMENTARY SCHOOLS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1930.

Defect or Disease.	Routine Inspections.		Special Inspections.	Returned to School after treatment.	Returned to School after re-inspection and treatment.
	No. of Defects.	No. of Defects.	No. of Defects.		
(a)	(b)	(c)	(d)	(e)	(f)
Malnutrition	23	13	3	—	—
Uncleanliness	—	—	—	—	—
A.—ROUTINE MEDICAL INSPECTIONS.					
Body	3	—	46	—	—
Number of Code Group Inspections—	4	—	90	—	—
Entrants .. non-tuberculous ..	112	3,054	1,108	—	—
Intermediates	46	3,340	31	—	—
Leavers	39	2,246	96	—	—
Eye					
Corneal Opacities	2	—	—	—	—
Defective Vision (excluding Squint) ..	548	376	8,640	—	—
Squint	73	115	111	—	—
Number of other Routine Inspections ..	15	9	155	—	—
Ear					
Otitis Media	49	2	183	—	—
Other Ear Diseases	18	—	66	—	—
Enlarged Tonsils only	508	908	—	—	—
Nose and Throat					
Adenoids only	3	5	8,795	—	—
Enlarged Tonsils and Adenoids	21	12	—	—	—
Other Conditions	63	2	—	—	—
Enlarged Cervical Glands (non-tuberculous)	1	6	2	—	—
Defective Speech	57	18	11	—	—
Teeth—Dental Diseases	215	—	—	—	—
B.—OTHER INSPECTIONS.					
Heart and Circulation					
Heart Disease	14	12	—	—	—
Anemia	38	7	67	—	—
Lungs					
Bronchitis	214	23	—	—	—
Pneumonia	9	2	15,805	—	—
Pulmonary:					
Definite	—	—	—	—	—
Suspected	2	—	25,004	—	—
Non-Pulmonary:					
Glands	4	1	—	—	—
Spine	—	—	—	—	—
Hip	2	—	—	—	—
Other Bones and Joints	3	—	4	—	—
Skin	—	—	—	—	—
Other Forms	—	1	9	—	—
Nervous System					
Epilepsy	6	1	10	—	—
Chorea	1	1	14	—	—
Other Conditions	18	7	12	—	—
Deformities					
Rickets	1	5	33	—	—
Spinal Curvature	—	1	12	—	—
Other Forms	21	29	21	—	—
Other Defects and Diseases	172	68	3,803	—	—

TABLE 21.

ELEMENTARY SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

Defect or Disease.				Routine Inspections.		Special Inspections.	
				No. of Defects.		No. of Defects.	
(1)				Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.
				(2)	(3)	(4)	(5)
Malnutrition				23	13	3	—
Uncleanliness				—	—	—	—
(See Table 24 Group V)							
Skin	{	Ringworm—Scalp		1	—	46	—
		Body		3	—	123	—
		Scabies		4	—	90	—
		Impetigo		41	1	322	—
		Other Diseases (non-tuberculous)		112	15	1,105	2
Eye	{	Blepharitis		46	—	31	—
		Conjunctivitis		39	1	96	—
		Keratitis		2	—	1	—
		Corneal Opacities		2	3	6	—
		Defective Vision (excluding Squint)		548	396	272	—
Ear	{	Squint		73	115	111	—
		Other conditions		15	9	61	—
		Defective Hearing		45	6	29	—
		Otitis Media		49	2	183	—
		Other Ear Diseases		18	—	66	—
Nose and Throat	{	Enlarged Tonsils only		508	908	53	—
		Adenoids only		3	5	15	—
		Enlarged Tonsils and Adenoids		21	12	31	—
Other Conditions				63	2	263	—
Enlarged Cervical Glands (non-tuberculous)				1	6	2	—
Defective Speech				57	15	11	—
Teeth—Dental Diseases				1,215	—	—	—
(See Table 24 Group IV)							
Heart and Circulation	{	Heart Disease :					
		Organic		14	12	—	1
Functional				5	6	5	—
Lungs	{	Anæmia		38	7	67	—
		Bronchitis		214	23	136	—
		Other Non-Tuberculous Diseases		9	2	84	—
Tuberculosis	{	Pulmonary :					
		Definite		—	—	10	—
		Suspected		2	—	26	—
		Non-Pulmonary :					
		Glands		4	1	2	—
		Spine		—	—	—	—
		Hip		2	—	1	—
Other Bones and Joints				3	—	4	—
Nervous System	{	Skin		—	—	—	—
		Other Forms		—	1	9	—
		Epilepsy		6	1	10	—
		Chorea		1	1	14	—
Deformities	{	Other Conditions		18	7	12	—
		Rickets		1	5	33	—
		Spinal Curvature		—	1	12	—
Other Forms				21	29	21	2
Other Defects and Diseases				172	68	3,803	—

ELEMENTARY SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

Defect or Disease.	Routine Inspections.		Special Inspections.	
	No. of Defects.		No. of Defects.	
	(1)	(2)	(3)	(4)
Other Defects and Diseases	175	68	21	29
Deformities				
Spinal Curvature	1	1	1	1
Rickets	1	5	3	3
Other Conditions	18	7	1	12
Chorea	1	1	1	14
Epilepsy	6	1	1	10
Other Forms	1	1	1	9
Skin	1	1	1	1
Other Bones and Joints	3	1	1	4
Hip	2	1	1	1
Spine	1	1	1	1
Glands	4	1	1	2
Non-Pulmonary:				
Suspected	2	1	1	26
Definite	1	1	1	10
Pulmonary:				
Other Non-Tuberculous Diseases	9	2	2	84
Bronchitis	214	23	23	136
Anæmia	38	7	7	67
Functional	2	6	6	5
Organic	14	12	12	1
Heart and Circulation				
Enlarged Cervical Glands (non-tuberculous)	1	6	6	2
Other Conditions	63	2	2	263
Enlarged Tonsils and Adenoids	21	12	12	31
Adenoids only	3	5	5	15
Enlarged Tonsils only	208	908	23	53
Other Ear Diseases	18	1	1	66
Otitis Media	49	2	2	183
Detective Hearing	45	6	6	29
Other conditions	15	9	9	61
Squint	73	115	111	111
Detective Vision (excluding Squint)	548	396	272	272
Cornal Opacities	2	2	6	1
Keratitis	2	1	1	1
Conjunctivitis	39	1	96	31
Blepharitis	46	1	31	31
Other Diseases (non-tuberculous)	112	15	1,105	1,105
Impetigo	41	1	322	90
Scabies	4	1	123	46
Body	3	1	1	1
Ringworm—Scalp	1	1	1	1
(See Table 24 Group V)				
Uncleanliness	1	1	1	1
Malnutrition	23	13	3	1
Other Defects and Diseases	175	68	21	29

TABLE 22.

ELEMENTARY SCHOOLS.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

<i>Group.</i> (1)	<i>No. of Children.</i>		<i>Percentage of Children found to require treatment.</i> (4)
	<i>Inspected.</i> (2)	<i>Found to require treatment.</i> (3)	
<i>Code Groups.</i>			
Entrants	3,054	657	21.5
Intermediates	3,340	953	28.5
Leavers	2,246	509	22.7
Total (Code Groups) ..	8,640	2,119	24.5
Other Routine Inspections	155	46	29.7

TABLE 22.
 INSPECTION IN THE YEAR 1939 BY DISTRICT.
 ELEMENTARY SCHOOLS.

ELEMENTARY SCHOOLS.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT
 ROUTINE MEDICAL INSPECTION TO REQUIRE TREAT-
 MENT (EXCLUDING UNCLEANLINESS AND DENTAL
 DISEASES).

Group. (1)	No. of Children.		Percentage of Children found to require treatment. (4)
	Inspected. (2)	Found to require treatment. (3)	
Code Groups. Entrants	3,054	657	21.5
Intermediates	3,340	953	28.5
Leavers	2,246	509	22.7
Total (Code Groups)	8,640	2,119	24.5
Other Routine Inspections	152	46	30.7

Year	No. of children	No. of children	No. of children	No. of children	No. of children	Total
1917	1	1	1	1	1	5
1918	1	1	1	1	1	5
1919	1	1	1	1	1	5
1920	1	1	1	1	1	5
1921	1	1	1	1	1	5
1922	1	1	1	1	1	5
1923	1	1	1	1	1	5
1924	1	1	1	1	1	5
1925	1	1	1	1	1	5
1926	1	1	1	1	1	5
1927	1	1	1	1	1	5
1928	1	1	1	1	1	5
1929	1	1	1	1	1	5
1930	1	1	1	1	1	5
1931	1	1	1	1	1	5
1932	1	1	1	1	1	5
1933	1	1	1	1	1	5
1934	1	1	1	1	1	5
1935	1	1	1	1	1	5
1936	1	1	1	1	1	5
1937	1	1	1	1	1	5
1938	1	1	1	1	1	5
1939	1	1	1	1	1	5
1940	1	1	1	1	1	5
1941	1	1	1	1	1	5
1942	1	1	1	1	1	5
1943	1	1	1	1	1	5
1944	1	1	1	1	1	5
1945	1	1	1	1	1	5
1946	1	1	1	1	1	5
1947	1	1	1	1	1	5
1948	1	1	1	1	1	5
1949	1	1	1	1	1	5
1950	1	1	1	1	1	5
1951	1	1	1	1	1	5
1952	1	1	1	1	1	5
1953	1	1	1	1	1	5
1954	1	1	1	1	1	5
1955	1	1	1	1	1	5
1956	1	1	1	1	1	5
1957	1	1	1	1	1	5
1958	1	1	1	1	1	5
1959	1	1	1	1	1	5
1960	1	1	1	1	1	5
1961	1	1	1	1	1	5
1962	1	1	1	1	1	5
1963	1	1	1	1	1	5
1964	1	1	1	1	1	5
1965	1	1	1	1	1	5
1966	1	1	1	1	1	5
1967	1	1	1	1	1	5
1968	1	1	1	1	1	5
1969	1	1	1	1	1	5
1970	1	1	1	1	1	5
1971	1	1	1	1	1	5
1972	1	1	1	1	1	5
1973	1	1	1	1	1	5
1974	1	1	1	1	1	5
1975	1	1	1	1	1	5
1976	1	1	1	1	1	5
1977	1	1	1	1	1	5
1978	1	1	1	1	1	5
1979	1	1	1	1	1	5
1980	1	1	1	1	1	5
1981	1	1	1	1	1	5
1982	1	1	1	1	1	5
1983	1	1	1	1	1	5
1984	1	1	1	1	1	5
1985	1	1	1	1	1	5
1986	1	1	1	1	1	5
1987	1	1	1	1	1	5
1988	1	1	1	1	1	5
1989	1	1	1	1	1	5
1990	1	1	1	1	1	5
1991	1	1	1	1	1	5
1992	1	1	1	1	1	5
1993	1	1	1	1	1	5
1994	1	1	1	1	1	5
1995	1	1	1	1	1	5
1996	1	1	1	1	1	5
1997	1	1	1	1	1	5
1998	1	1	1	1	1	5
1999	1	1	1	1	1	5
2000	1	1	1	1	1	5
2001	1	1	1	1	1	5
2002	1	1	1	1	1	5
2003	1	1	1	1	1	5
2004	1	1	1	1	1	5
2005	1	1	1	1	1	5
2006	1	1	1	1	1	5
2007	1	1	1	1	1	5
2008	1	1	1	1	1	5
2009	1	1	1	1	1	5
2010	1	1	1	1	1	5
2011	1	1	1	1	1	5
2012	1	1	1	1	1	5
2013	1	1	1	1	1	5
2014	1	1	1	1	1	5
2015	1	1	1	1	1	5
2016	1	1	1	1	1	5
2017	1	1	1	1	1	5
2018	1	1	1	1	1	5
2019	1	1	1	1	1	5
2020	1	1	1	1	1	5
2021	1	1	1	1	1	5
2022	1	1	1	1	1	5
2023	1	1	1	1	1	5
2024	1	1	1	1	1	5
2025	1	1	1	1	1	5
2026	1	1	1	1	1	5
2027	1	1	1	1	1	5
2028	1	1	1	1	1	5
2029	1	1	1	1	1	5
2030	1	1	1	1	1	5
2031	1	1	1	1	1	5
2032	1	1	1	1	1	5
2033	1	1	1	1	1	5
2034	1	1	1	1	1	5
2035	1	1	1	1	1	5
2036	1	1	1	1	1	5
2037	1	1	1	1	1	5
2038	1	1	1	1	1	5
2039	1	1	1	1	1	5
2040	1	1	1	1	1	5
2041	1	1	1	1	1	5
2042	1	1	1	1	1	5
2043	1	1	1	1	1	5
2044	1	1	1	1	1	5
2045	1	1	1	1	1	5
2046	1	1	1	1	1	5
2047	1	1	1	1	1	5
2048	1	1	1	1	1	5
2049	1	1	1	1	1	5
2050	1	1	1	1	1	5

REPORT OF THE EXCELLENCE CHILDREN IN THE YEAR

TABLE 24.

ELEMENTARY SCHOOLS.

RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31st DECEMBER, 1930.Group II.—DEFECTIVE VISION AND SQUINT (excluding
Minor Eye Defects—Group I).
TREATMENT TABLE.Group I.—MINOR AILMENTS (Excluding Uncleanliness, for
which see Group V). *Number of defects dealt with.*

Disease or Defect. (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp	40	6	46
Ringworm—Body	123	—	123
Scabies	90	—	90
Impetigo	320	1	321
Other Skin Diseases	1,102	2	1,104
Minor Eye Defects— (External and other, but ex- cluding cases falling in Group II).	304	240	544
TOTAL	1,884	21	1,905
Minor Ear Defects	243	42	285
Miscellaneous—Minor (e.g. minor injuries, bruises, sores, chilblains, etc.)	2,392	9	2,401
Miscellaneous—Other	345	1,513	1,858
TOTAL	4,959	1,813	6,772

N.B.—19 cases of Ringworm of the Scalp were treated by X-ray
during the year.

ELEMENTARY SCHOOLS.

RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31st DECEMBER, 1930.

TREATMENT TABLE.

Group I.—MINOR AILMENTS (Excluding Uncleanliness, for
which see Group V).

Disease or Defect. (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp	40	6	46
Ringworm—Body	123	—	123
Scabies	90	—	90
Impetigo	320	1	321
Other Skin Diseases	1,102	2	1,104
Minor Eye Defects— (External and other, but ex- cluding cases falling in Group II.)	304	240	544
Minor Ear Defects	243	42	285
Miscellaneous—Minor (e.g. minor injuries, bruises, sores, chilblains, etc.)	2,392	9	2,401
Miscellaneous—Other	342	1,513	1,855
TOTAL	4,959	1,813	6,772

N.B.—19 cases of Ringworm of the Scalp were treated by X-ray
during the year.

TABLE 24.—(continued)

Group II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease.	Number of defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at Hospital, apart from the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint)	1,228	188	—	1,416
Other Defect or Disease of the eyes (excluding those recorded in Group I)	356	—	21	377
TOTAL ..	1,584	188	21	1,793

Total Number of Children for whom Spectacles were prescribed :—

(a) Under the Authority's Scheme	933
(b) Otherwise	181

Total Number of Children who obtained or received Spectacles :—

(a) Under the Authority's Scheme	799
(b) Otherwise	315

TABLE 24.—(continued)
 REPORT ON DEFECTIVE VISION AND SQUINT (excluding
 Minor Eye Defects treated as Minor Affirmations—Group I).

Number of defects dealt with.		Group I—MINOR AFFIRMATIONS (which see Group I)	
Total.	Otherwise.	Submitted to refraction by private practitioner or at Hospital, apart from the Authority's Scheme.	Under the Authority's Scheme.
(5)	(4)	(3)	(2)
1,418	—	188	1,228
377	21	—	356
1,793	21	188	1,584

Total Number of Children for whom Spectacles were prescribed:—
 (a) Under the Authority's Scheme 933
 (b) Otherwise 181

Total Number of Children who obtained or received Spectacles:—
 (a) Under the Authority's Scheme 799
 (b) Otherwise 315

N.B.—Is cases of Squint of the eyes recorded during the year.

TABLE 24.—continued.

Group IV.—DENTAL DEFECTS.

- (1) Number of Children who were :—
 (a) Inspected by the Dentist :
 Aged :

TABLE 24.—(continued).

Group III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.

<i>Received Operative Treatment.</i>		<i>Total.</i>	<i>Received other forms of Treatment.</i>	<i>Total number treated.</i>
<i>Under the Authority's Scheme, in Clinic or Hospital.</i>	<i>By Private Practitioner or Hospital, apart from the Authority's Scheme.</i>			
(1)	(2)	(3)	(4)	(5)
197	33	230	682	912

(2) Half-days devoted to—	Inspection	394		
	Treatment	1,313		1,517
(3) Attendances made by children for treatment ..				12,887
(4) Fillings—				
	Permanent Teeth	3,092		
	Temporary Teeth	1,531		4,623
(5) Extractions—				
	Permanent Teeth	3,009		
	Temporary Teeth	14,985		17,994
(6) Administrations of general Anæsthetics for extractions				4,291
(7) Other Operations—				
	Permanent Teeth	1,159		
	Temporary Teeth	692		1,851

TABLE 24.—(continued).
 Group III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.
 NUMBER OF DEFECTS.

Total number treated.	Received other forms of treatment.	Received Operative Treatment.		
		Total.	By Private Practitioners or Hospital, apart from the Authority's Schemes.	Under the Authority's Schemes in Hospital, Clinic or Hospital.
(5)	(4)	(3)	(2)	(1)
912	682	230	33	197

TABLE 24.—continued.

Group IV.—DENTAL DEFECTS.

(1)	Number of Children who were :—					
	(a)	Inspected by the Dentist :				
		Aged :				
			5 ..	2,476		
			6 ..	1,754		
			7 ..	1,809		
			8 ..	1,904		
			9 ..	2,077		
	Routine Age Groups		10 ..	2,108	Total ..	15,965
			11 ..	1,083		
			12 ..	866		
			13 ..	871		
			14 ..	774		
			15 ..	243		
	(i.)	Average number of visits made during the year by the School Nurses—				
	(ii.)	Total number of examinations of children in the Schools by Specials ..	81,443			2,964
	(iii.)	Number of individual children found ..			Grand Total ..	18,929
	(iv.)	(b) Found to require treatment ..		11,896		
		(c) Actually treated ..		8,022		
		(d) Re-treated during the year as the result of periodical examination ..		2,795		Nil.
(2)	Half-days devoted to—					
	Inspection			204		
	Treatment			1,313	..	1,517
(3)	Attendances made by children for treatment ..					12,887
(4)	Fillings—					
	Permanent Teeth			3,092		
	Temporary Teeth			1,531	..	4,623
(5)	Extractions—					
	Permanent Teeth			3,009		
	Temporary Teeth			14,985	..	17,994
(6)	Administrations of general Anæsthetics for extractions					4,291
(7)	Other Operations—					
	Permanent Teeth			1,159		
	Temporary Teeth			692	..	1,851

Group IV.—DENTAL DEFECTS.

(1) Number of Children who were:—
 (a) Inspected by the Dentist:
 Aged:

5	2,476	Routine Age Groups
6	1,754	
7	1,809	
8	1,904	
9	2,077	
10	2,108	
11	1,083	
12	868	
13	871	
14	774	
15	243	
Total	15,965	

Specials	2,964
Grand Total	18,929
(2) Half-days devoted to—	2,795
Inspection	204
Treatment	1,313
(3) Attendances made by children for treatment	12,887
(4) Fillings—	3,092
Permanent Teeth	1,531
Temporary Teeth	4,623
(5) Extractions—	3,009
Permanent Teeth	14,985
Temporary Teeth	17,994
(6) Administrations of general Anesthetics for extractions	4,291
(7) Other Operations—	1,159
Permanent Teeth	692
Temporary Teeth	1,851

TABLE 25.

TABLE 24.—continued.

Group V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1930.

- (i.) Average number of visits per school made during the year by the School Nurses—4.7.
- (ii.) Total number of examinations of children in the Schools by School Nurses—81,442.
- (iii.) Number of individual children found unclean—7,435.
- (iv.) Number of children cleansed under arrangements made by the Local Education Authority—484.
- (v.) Number of cases in which legal proceedings were taken :—
 - (a) Under the Education Act, 1921 .. Nil.
 - (b) Under School Attendance Bye-laws .. Nil.

Boys ..	78	164	172	156	252	177	50	30	1089
Girls ..	67	247	241	168	188	186	121	43	1261
Total	145	411	413	324	440	363	181	73	2350

Group IV.—DENTAL EXAMINATIONS

(i) Number of children who were examined by the Local Education Authority—484.

TABLE 24.—continued.

Group V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

- (i.) Average number of visits per school made during the year by the School Nurses—4.7.
- (ii.) Total number of examinations of children in the Schools by School Nurses—81,442.
- (iii.) Number of individual children found unclean—7,432.
- (iv.) Number of children cleansed under arrangements made by the Local Education Authority—484.
- (v.) Number of cases in which legal proceedings were taken:—
 - (a) Under the Education Act, 1921 .. Nil.
 - (b) Under School Attendance By-laws .. Nil.

Category	Number
(1) Attendance made by children for dental treatment	484
(2) Examinations	81,442
(3) Children found unclean	7,432
(4) Children cleansed	484
(5) Legal proceedings taken	Nil
(6) Under the Education Act, 1921	Nil
(7) Under School Attendance By-laws	Nil

TABLE 26.

SECONDARY AND HIGHER SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

TABLE 25.

SECONDARY AND HIGHER SCHOOLS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1930.

ROUTINE MEDICAL INSPECTIONS.

Defect or Disease.	Routine Inspections.		Special Inspections.						
	No. of Defects.		No. of Defects.						
(1)	(2)	(3)	(4)	(5)					
Malnutrition									
Ringworm									
Scalp									
Body									
Scabies									
Impetigo									
Other Diseases (non-tuberculous)	18	1							
Blepharitis									
Conjunctivitis									
Keratitis									
Corneal Opacities									
Defective vision (excluding Squint)	197	525							
Squint	3	21							
Other Conditions									
Defective Hearing	11	2							
Otitis	12								
Other Ear Diseases	2								
Enlarged Tonsils only	82	173	17 & over						
Adenoids	10	11							
Enlarged Tonsils and Adenoids	15	4							
Other Conditions	9								
Enlarged Cervical Glands (non-tuberculous)									
Boys ..	78	164	172	156	252	177	60	30	1089
Girls ..	67	247	241	168	188	186	121	43	1261
Total	145	411	413	324	440	363	181	73	2350

TABLE 25.

SECONDARY AND HIGHER SCHOOLS.
 RETURN OF MEDICAL INSPECTIONS FOR THE YEAR
 ENDED 31st DECEMBER, 1930.

ROUTINE MEDICAL INSPECTIONS.

	Age.								Total
	10	11	12	13	14	15	16	17 & over	
Boys ..	78	164	172	156	252	177	60	30	1089
Girls ..	67	247	241	168	188	186	121	43	1261
Total	145	411	413	324	440	363	181	73	2350

TABLE 26.

SECONDARY AND HIGHER SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

Defect or Disease.		Routine Inspections.		Special Inspections.	
		No. of Defects.		No. of Defects.	
		Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.
(1)		(2)	(3)	(4)	(5)
	Malnutrition	1	1	—	—
Skin	Ringworm :				
	Scalp	—	—	—	—
	Body	—	—	—	—
	Scabies	—	—	—	—
	Impetigo	—	—	—	—
	Other Diseases (non-tuberculous) ..	15	1	—	—
Eye	Blepharitis	6	—	—	—
	Conjunctivitis	15	—	—	—
	Keratitis	—	—	—	—
	Corneal Opacities	—	—	—	—
	Defective Vision (excluding Squint) ..	157	325	—	—
	Squint	3	21	—	—
	Other Conditions	—	—	—	—
Ear	Defective Hearing	11	2	—	—
	Otitis Media	10	—	—	2
	Other Ear Diseases	2	—	—	—
Nose and Throat	Enlarged Tonsils only	52	173	—	—
	Adenoids only	—	1	—	—
	Enlarged Tonsils and Adenoids	15	24	—	—
	Other Conditions	9	1	—	—
	Enlarged Cervical Glands (non-tuberculous) ..	—	1	—	—
	Defective Speech	13	3	—	—
	Teeth—Dental Diseases	247	—	—	3
Heart and Circulation	Heart Disease :				
	Organic	8	5	—	2
	Functional	1	8	—	—
Lungs	Anæmia	1	1	—	—
	Bronchitis	7	—	—	—
	Other Non-Tuberculous Diseases	2	1	—	—
	Pulmonary :				
	Definite	—	—	—	—
	Suspected	—	1	—	—
Tuberculosis.	Non-Pulmonary :				
	Glands	—	—	—	—
	Spine	—	—	—	—
	Hip	—	—	—	—
	Other Bones and Joints	—	—	—	—
	Skin	—	—	—	—
	Other Forms	1	7	—	—
Nervous System	Epilepsy	2	—	—	—
	Chorea	1	—	—	—
	Other Conditions	9	—	—	—
Deformities	Rickets	—	—	—	—
	Spinal Curvature	1	2	—	1
	Other Forms	68	32	—	—
	Other Defects and Diseases	37	5	1	16

SECONDARY AND HIGHER SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1930.

Special Inspections.		Routine Inspections.		Defect or Disease.
No. of Defects.		No. of Defects.		
No. of children of whom medical inspection was made.	(a)	No. of children of whom medical inspection was made.	(b)	(c)
10	1	32	37	Defects and Diseases
1	1	1	1	Other Forms
1	1	1	1	Spinal Curvature
1	1	1	1	Rickets
1	1	1	1	Other Conditions
1	1	1	1	Chorea
1	1	1	1	Epilepsy
1	1	1	1	Other Forms
1	1	1	1	Skin
1	1	1	1	Other Bones and Joints
1	1	1	1	Hip
1	1	1	1	Spine
1	1	1	1	Glands
1	1	1	1	Non-Pulmonary
1	1	1	1	Suspected
1	1	1	1	Diphtheria
1	1	1	1	Pulmonary
1	1	1	1	Other Non-Tuberculous Diseases
1	1	1	1	Rheumatism
1	1	1	1	Anemia
1	1	1	1	Functional
1	1	1	1	Organic
1	1	1	1	Heart Disease
1	1	1	1	Dental Diseases
1	1	1	1	Defective Speech
1	1	1	1	Enlarged Cervical Glands (non-tuberculous)
1	1	1	1	Other Conditions
1	1	1	1	Enlarged Tonsils and Adenoids
1	1	1	1	Adenoids only
1	1	1	1	Enlarged Tonsils only
1	1	1	1	Other Ear Diseases
1	1	1	1	Otitis Media
1	1	1	1	Defective Hearing
1	1	1	1	Other Conditions
1	1	1	1	Spint
1	1	1	1	Defective Vision (excluding Spint)
1	1	1	1	Corneal Opacities
1	1	1	1	Keratitis
1	1	1	1	Conjunctivitis
1	1	1	1	Blepharitis
1	1	1	1	Other Diseases (non-tuberculous)
1	1	1	1	Impetigo
1	1	1	1	Scabies
1	1	1	1	Body
1	1	1	1	Scalp
1	1	1	1	Ringworm
1	1	1	1	Malnutrition

TABLE 28.

SECONDARY SCHOOLS.

DEFECTIVE VISION AND SQUINT.

TABLE 27.

SECONDARY AND HIGHER SCHOOLS.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group.	Number of Children.		Percentage of Children found to require treatment.
	Inspected.	Found to require treatment.	
(1)	(2)	(3)	(4)
Total ..	2,350	418	17.8

Total number of Children for whom Spectacles were prescribed:—

- (a) Under the Authority's Scheme 129
- (b) Otherwise 68

Total number of Children who obtained or received Spectacles:—

- (a) Under the Authority's Scheme 53
- (b) Otherwise 144

TABLE 27.
 SECONDARY AND HIGHER SCHOOLS.
 A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER 1918.

TABLE 27.
 SECONDARY AND HIGHER SCHOOLS.
 B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Percentage of Children found to require treatment. (4)	Number of Children.		Group. (1)
	Found to require treatment. (3)	Inspected. (2)	
17.8	418	2,350	Total ..

TABLE 28.

SECONDARY SCHOOLS.

DEFECTIVE VISION AND SQUINT.

Defect or Disease.	Number of Defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at Hospital, apart from the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint) ..	136	69	—	205
Other Defect or Disease of the Eyes ..	3	—	—	3
TOTAL ..	136	69	—	205

Total number of Children for whom Spectacles were prescribed :—

(a) Under the Authority's Scheme	129
(b) Otherwise	68

Total number of Children who obtained or received Spectacles :—

(a) Under the Authority's Scheme	53
(b) Otherwise	144

DEFECTIVE VISION AND SQUINT.
SECONDARY SCHOOLS.
TABLE 28.

Number of Defects dealt with.				
Total.	Otherwise.	Authority's Scheme.	Hospital, or private practitioner or otherwise.	Authority's Scheme.
(5)	(4)	(3)	(2)	(1)
205	—	89	136	Errors of Refraction (including Squint) ..
—	—	—	—	Other Defect or Disease of the Eyes ..
205	—	89	136	TOTAL ..

Total number of Children for whom Spectacles were prescribed:—

129	(a) Under the Authority's Scheme
88	(b) Otherwise

Total number of Children who obtained or received Spectacles:—

53	(a) Under the Authority's Scheme
144	(b) Otherwise

TABLE 30.

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED DECEMBER 31st, 1930, BY THE LOCAL EDUCATION AUTHORITY TO THE MENTAL DEFICIENCY AUTHORITY.

Total Number of Children notified ... 60.

ANALYSIS OF THE ABOVE TOTAL.
TABLE 29.

SECONDARY AND HIGHER SCHOOLS.

Girls.

TREATMENT OF DEFECTS OF NOSE AND THROAT.

1. (i) Children in receipt of instruction in a Special School—

NUMBER OF DEFECTS.
further benefit from instruction in a Special School—

<i>Received Operative Treatment.</i>				
<i>Under the Authority's Scheme in Clinic or Hospital.</i>	<i>By Private Practitioner or Hospital, apart from the Authority's Scheme.</i>	<i>Total.</i>	<i>Received other forms of Treatment.</i>	<i>Total number treated.</i>
(1)	(2)	(3)	(4)	(5)
9	3	12	2	14
3. Feeble-minded children notified under Article 3 of the 1928 Regulations, i.e. "Special Circumstances" cases				1
4. Children who in addition to being mentally defective were blind and deaf				
TOTAL			30	24

TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.

Total number treated.	Received other forms of Treatment.	Received Operative Treatment.		
		Total.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Under the Authority's Scheme in Hospital, Clinic or Hospital.
(5)	(4)	(3)	(2)	(1)
14	2	12	3	9

Total number of children for whom treatment was given:

- (a) Under the Authority's Scheme 9
- (b) Operative 3

Total number of children who received no treatment:

- (a) Under the Authority's Scheme 5
- (b) Operative 14

TABLE 30.

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED DECEMBER 31st, 1930, BY THE LOCAL EDUCATION AUTHORITY TO THE MENTAL DEFICIENCY AUTHORITY.

Total Number of Children notified .. 60.

ANALYSIS OF THE ABOVE TOTAL.

<i>Diagnosis.</i>	<i>Boys.</i>	<i>Girls.</i>
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School—		
(a) Idiots	1	1
(b) Imbeciles	11	5
(c) Others	—	—
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children—		
(a) Moral Defectives	—	—
(b) Others	—	—
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16	24	17
3. Feeble-minded children notified under Article 3 of the 1928 Regulations, i.e. "Special Circumstances" cases	—	1
4. Children who in addition to being mentally defective were blind and deaf	—	—
TOTAL ..	36	24

TABLE 30.

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED DECEMBER 31st, 1930, BY THE LOCAL EDUCATION AUTHORITY TO THE MENTAL DEFICIENCY AUTHORITY.

Total Number of Children notified 60

ANALYSIS OF THE ABOVE TOTAL.

Girls	Boys	Diagnosis.
		1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School—
1	1	(a) Idiots
5	11	(b) Imbeciles
—	—	(c) Others
		(ii) Children unable to be instructed in a Special School without detriment to the interests of other children—
—	—	(a) Moral Defectives
—	—	(b) Others
		2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16
17	24	
		3. Feeble-minded children notified under Article 3 of the 1928 Regulations, i.e. "Special Circumstances" cases
1	—	
		4. Children who in addition to being mentally defective were blind and deaf
—	—	
24	36	TOTAL

TABLE 31

CASES OF INFECTIOUS SICKNESS OCCURRING ON
VESSELS DURING THE VOYAGE BUT DISPOSED OF
PRIOR TO ARRIVAL.

<i>Disease.</i>	<i>Cases during 1930.</i>		<i>Average No. of cases for previous 5 years.</i>	<i>No. of Vessels concerned.</i>
	<i>Passengers</i>	<i>Crew.</i>		
Smallpox	1	5	4.0	4
Scarlet Fever ..	2	—	0.8	1
Diphtheria	1	—	0.6	1
Enteric Fever ..	—	3	6.4	3
Pneumonia	4	6	12.4	9
Dysentery	5	2	8.4	7
Pulmonary Tuberculosis	10	7	9.8	13
Malaria contracted abroad	9	4	54.4	10
Chicken-pox	5	—	5.0	5
Measles	7	—	18.6	6
Paratyphoid	—	(2)	(0.6)	(2)
Influenza	1	—	7.2	1
Venereal Diseases ..	2	7	11.4	9
TOTALS ..	47	34	139.0	69

TABLE 32.

MEDICAL INSPECTION OF ALIENS. PORT SANITARY DISTRICT OF PLYMOUTH.
YEAR ENDED DECEMBER 31st, 1930.

	Total.	Number inspected by the Medical Inspector.	Number subjected to detailed examination by the Medical Inspector.	CERTIFICATES ISSUED.					TRANSMIGRANT	
				Lunatic Idiot or M.D.	Undesirable for Medical Reasons.	Physically Incapacitated.	Suffering from acute Infectious Disease.	Landing necessary for adequate Medical Examination.	Verminous.	Trachoma Favus, etc.
				(a)	(b)	(c)	(d)	(e)		
(a) Total number of Aliens (excluding Alien Seamen) landing at the Port	16,655	16,269	386	—	—	—	1	—	—	—
(b) Aliens refused permission to land by Immigration Officer	2	—	2	1	1	—	—	—	—	—
(c) Transmigrants	1,022	1,006	16	—	—	—	—	—	—	—
Total Aliens arriving at the Port	17,679	17,275	404	1	1	—	1	—	—	—

Also 537 Alien Seamen of whom 9 were medically examined.

(a) Total number of vessels carrying Alien Passengers	782
(b) Number of such vessels dealt with by the Medical Inspector	782

TABLE A.

	Total.
Analysis of Aliens landing [see 1 (a)].	
Residents Returning	237
In Transit	1,193
Visitors	13,370
Business	950
Diplomatic	332
Seamen	50
Contract Seamen	487
Ministry of Labour Permit (M.L.):—	
(a) Males	112
(b) Females	119
(c) Children	9
Aliens coming to settle, not holding M.L. Permits:—	
(a) Males	156
(b) Females	124
(c) Children	53
Total	17,192

TABLE B.

Classification of Aliens referred to the Medical Inspector by the Immigration Officer for detailed examination:—	Examined.	No. of certificates issued.
(i) holding Ministry of Labour permits	69	—
(ii) intending to take up employment and remain in the country over three months	43	—
(iii) intending to make their home in this country	45	—
(iv) students coming for educational purposes	62	—
(v) in regard to whom there is any mention of health as a reason for their visit	5	—
(vi) who appear to the I.O. (a) not to be in robust health; (b) to be mentally or physically abnormal or subnormal; (c) to be dirty in their person, or (d) are selected for special reasons	178	3
(vii) seamen travelling as passengers	9	—

MEDICAL INSPECTION OF ALIENS REPORT
YEAR ENDED DECEMBER

Classification of Aliens	Number of Aliens	Number of Aliens	Number of Aliens	Number of Aliens	
				Number of Aliens	Number of Aliens
Total	17,078	17,276	16,208	1,068	1,022
Transients	17,078	17,276	16,208	1,068	1,022
Permanent Residents	0	0	0	0	0

Also 537 Alien Seamen of whom 9 were medically
Total number of vessels carrying Alien Passengers ... 782
Number of such vessels dealt with by the Medical Inspector ... 782

TABLE A.

Classification of Aliens	Total	of them landing [see I (a)]	
		Males	Females
(i) holding M.I.	237	...	...
(ii) intending to return to their country of origin	1,193	...	...
(iii) intending to remain in the country	13,370	...	...
(iv) students commencing their course of study	950	...	...
(v) in regard to whom a reason for their presence is given	332	...	...
(vi) who appear to be normal	50	...	...
(vii) seamen travelling	487	...	...
(viii) of Labour Permit (M.L.)	871	...	...
(ix) coming to settle, not holding M.I.	112	...	...
(x) Males	119	...	...
(xi) Females	9	...	...
(xii) Children	156	...	...
(xiii) Males	124	...	...
(xiv) Females	32	...	...
(xv) Children	17,192	...	...

TABLE 33.

AMOUNT OF SHIPPING ENTERING THE PORT
DURING THE YEAR 1930.

	Number.	Registered Tonnage of vessels visited.	Number Inspected by the		Number reported to be defective.	Number of vessels on which defects were remedied.	Number of vessels reported as having, or having had during the voyage inf. dis. on board
			Port M.O.	Insp.			
FOREIGN—							
Steamers ..	1,388	6,456,968	710	453	36	32	209
Motor ..	219	536,996	80	51	2	2	25
Sailing ..	89	6,830	13	101	1	1	—
*Fishing ..	*	30	1	1	—	—	—
Total Foreign	1,696	7,000,824	804	606	39	35	234
COASTWISE—							
Steamers ..	1,086	331,191	3	629	40	37	1
Motor ..	527	8,250	1	38	1	1	—
Sailing ..	107	2,810	—	32	2	1	—
*Fishing ..	*	776	—	20	1	1	—
Total Coastwise	1,720	343,027	4	719	44	40	1
Grand Total ..	3,416	7,343,851	808	1,325	83	75	235

* There is no record of the amount of fishing traffic entering the Port.

TABLE 33

AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1930.

Number of vessels visited.	Registered Tonnage of vessels visited.	Number inspected by the		Number reported to be defective.	Number of vessels on which defects were reported.	Number of vessels tested as having had defects during the voyage in the port.
		Port M.O.	Insp.			
1,388	6,456,968	710	453	36	33	209
219	536,966	80	51	2	2	25
89	6,830	13	101	1	1	—
*	30	1	1	—	—	—
1,696	7,000,824	804	606	39	35	234
COASTWISE—						
1,086	331,191	3	639	40	37	1
527	8,250	1	38	1	1	—
107	2,810	—	32	2	1	—
*	776	—	20	1	1	—
1,720	343,027	4	719	44	40	1
3,416	7,343,851	808	1,325	83	75	235

* There is no record of the amount of fishing traffic entering the Port.

TABLE 34.

**RECORDS OF VESSELS INSPECTED, TONNAGES, CREWS, PASSENGERS, SICKNESSES, ETC., FOR THE
TEN YEARS ENDED 1930.**

YEAR.	No. of vessels inspected.	NATIONALITY.		No. of crews on board.	Registered Tonnage.	PASSENGERS.		SICKNESS.		Deaths.	Landed for Treatment.	INSANITARY.	
		British.	Foreign.			On Board.	Landing.	during voyage.	Infectious.			No. of vessels.	No. of defects.
1921	1,950	1,475	475	100,830	2,729,713	131,077	15,892	507	350	60	6	154	686
1922	2,056	1,543	513	132,266	3,642,135	117,293	22,596	312	487	65	2	147	610
1923	2,195	1,571	624	142,960	4,197,209	105,805	22,657	501	301	52	1	160	542
1924	2,403	1,769	634	166,106	4,228,321	122,266	25,132	732	526	48	3	174	737
1925	2,657	1,900	757	186,184	4,884,659	158,408	38,408	625	463	59	—	179	912
1926	2,967	2,208	759	208,693	5,564,945	176,731	40,264	609	338	73	8	161	889
1927	3,282	2,527	755	230,809	6,196,506	193,031	46,196	630	365	47	26	172	847
1928	2,869	2,155	714	251,553	6,740,888	208,187	43,963	853	448	61	131	127	690
1929	2,261	1,781	480	248,119	6,565,530	213,386	47,471	1,224	636	71	134	103	633
1930	2,071	1,424	647	267,973	7,343,851	224,753	45,002	1,401	637	60	160	83	314

YEAR	Unaffected Assess No. of	British	Foreign		Total No. of	Total No. of	Registered	On Board		Total No. of	Deaths	Total No. of	Deaths	No. of Infectious	Sickness		No. of Deaths
			British	Foreign				British	Foreign						British	Foreign	
1830	5,011	1,454	641	361,813	1,373,821	354,123	42,005	1,401	631	60	190	22	314				
1831	5,581	1,181	480	342,119	2,222,230	313,388	41,411	1,554	638	11	134	103	633				
1832	5,206	5,122	114	521,223	2,140,228	502,181	43,083	223	442	61	131	131	660				
1833	5,525	5,251	122	530,200	2,106,206	133,031	46,156	230	382	41	58	115	241				
1834	5,021	5,502	122	502,083	2,224,042	112,131	40,504	608	338	13	2	101	220				
1835	5,621	1,600	121	189,124	4,224,020	122,408	32,402	252	463	26	—	116	315				
1836	5,403	1,162	634	102,102	4,552,351	155,506	52,133	135	230	42	2	114	131				
1837	5,102	1,211	654	143,060	4,161,506	102,202	55,221	201	301	25	1	100	245				
1838	5,026	1,243	212	135,566	3,645,132	111,583	55,286	315	421	62	5	141	610				
1839	1,820	1,412	412	100,230	5,150,113	131,011	12,265	201	320	60	6	124	626				

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RECORDS OF ASSAULTS INFLICTED, LOUJAGES, SWAMS, BURGERS, SICKNESSES, ETC., FOR THE

YEAR 34

TABLE 35.

NATIONALITY OF VESSELS INSPECTED.

LOCATION OF INSPECTED VESSELS.

FOR YEAR ENDING 31ST DECEMBER, 1930.

<i>Place.</i>	<i>Number of Vessels Inspected.</i>	<i>Insanitary.</i>
Cattedown	72	7
Cattewater Harbour and Wharves ..	51	4
Cawsand	187	—
Devonport Dockyard	2	—
Forder	2	—
Great Western Docks	504	42
Hamoaze	1	—
Laira	57	9
Ocean Quay	8	1
Pomphlet	5	—
Saltash	1	—
Sound	587	4
Stonehouse Pool, Creek and Wharves ..	5	—
Sutton Harbour	216	17
Tamar Canal and Wharf	3	—
Victoria Wharves	370	1
TOTAL ..	2071	85
<i>Norwegian</i>	1	—
<i>Russian</i>	6	3
<i>Spanish</i>	30	3
<i>Swedish</i>	—	—
TOTAL ..	2071	85

TABLE 35.
 LOCATION OF INSPECTED VESSELS.
 FOR YEAR ENDING 31st DECEMBER, 1930.

Place.	Number of Vessels Inspected.	Insanitary.
Victoria Wharves ..	370	1
Tamar Canal and Wharf ..	3	—
Sutton Harbour ..	218	17
Stonehouse Pool, Creek and Wharves ..	5	—
Sound ..	587	4
Salisbury ..	1	—
Pomphlet ..	5	—
Ocean Quay ..	8	1
Lair ..	57	3
Hamosax ..	1	—
Great Western Docks ..	504	42
Forder ..	2	—
Devonport Dockyard ..	2	—
Cawsand ..	187	—
Cattewater Harbour and Wharves ..	51	4
Cattedown ..	72	7
TOTAL ..	2071	85

TABLE 37.

TABLE 36.

DETAILED LIST OF SANITARY DEFECTS FOR THE YEAR.

NATIONALITY OF VESSELS INSPECTED.

During the year 85 vessels were found to be in an insanitary condition, the following defects being notified to the Masters, Owners or Agents:

Number of Vessels Inspected—British .. 1424

“ “ “ Foreign .. 647

No. of Defects
As per detailed List below .. 2071

Nationality.	Vessels.	
	Inspected.	Insanitary.
BRITISH	1424	69
American	90	—
Austrian	1	—
Belgian	6	—
Danish	9	—
Danzigian	1	—
Dutch	118	2
Esthonian	1	—
Finnish	8	—
French	248	—
German	66	1
Greek	18	5
Italian	10	1
Japanese	2	—
Jugo-Slavian	1	—
Latvian	1	—
Norwegian	24	1
Russian	1	—
Spanish	6	3
Swedish	36	3
TOTAL	2071	85

TABLE 36.

NATIONALITY OF VESSELS INSPECTED.

Number of Vessels Inspected—British .. 1424
 Foreign .. 647

As per detailed list below .. 2071

Vessels		Nationality.
Inspected.	Country.	
1424	69	British
90	—	American
1	—	Austrian
6	—	Belgian
9	—	Danish
1	—	Danish
118	2	Dutch
1	—	Estonian
8	—	Finnish
248	—	French
60	1	German
18	5	Greek
10	1	Italian
2	—	Japanese
1	—	Jugo-Slavian
1	—	Latvian
24	1	Norwegian
1	—	Russian
6	3	Spanish
30	3	Swedish
2071	85	TOTAL

TABLE 37.

DETAILED LIST OF SANITARY DEFECTS FOR THE YEAR.

During the year 85 vessels were found to be in an insanitary condition, the following defects being notified to the Masters, Owners or Agents :—

<i>No. of Defects</i>	<i>Nature of Defects.</i>
5	Bunks to be thoroughly cleansed and painted.
3	Cabins to be thoroughly cleansed.
2	Chain pipes to be repaired and made tight.
33	Crew's quarters to be thoroughly cleansed and painted or lime-washed.
14	Crew's quarters to be fumigated for the destruction of bugs.
4	Crew's quarters to be provided with adequate means of ventilation.
2	Decks to be cleared of offensive matter, washed down and cleansed after discharge of cargo.
2	Decks over crew's quarters to be caulked and made tight.
1	Door of crew's quarters to be rehung.
2	Flushing cisterns to be repaired and made workable.
7	Fo'c'sles to be thoroughly cleansed.
2	Fo'c'sle heads to be caulked and made tight.
60	Food lockers to be thoroughly cleansed and painted or limewashed.
1	Food locker (door) to be repaired.
1	Food scattered over crew's quarters to be stowed in locker.
1	Galley to be thoroughly cleansed.
7	Messrooms to be thoroughly cleansed and painted or limewashed.
1	Oven to be repaired.
6	Rubber washers to be fitted to side lights.
14	Side lights to be repaired and made tight.
10	Side lights to be renewed.
3	Spare gear to be removed from crews' quarters and stowed in bins fitted for the purpose.
1	Straw mattress to be re-covered.
33	Ventilators (Cooper's) to be repaired and made workable or renewed.
5	Ventilators to be freed from packing and coverings.
2	Wash-hand basins to be thoroughly cleansed.
1	Wash-hand basin to be replaced by new.
1	Wash room to be thoroughly cleansed and painted or limewashed.
5	Water closets to be cleared of rubbish.
59	Water closets to be thoroughly scrubbed, cleansed, and painted or limewashed.
8	Water closets (dark) to be fitted with side lights.
7	Water closet pans (broken or cracked) to be replaced by new.
1	Water closet chain to be repaired.
2	Water closet doors to be rehung.
2	Water closet locks to be repaired or renewed.
2	Water closet seats to be fitted.
4	Water tanks to be thoroughly cleansed and cement washed.

TABLE 37.

DETAILED LIST OF SANITARY DEFECTS FOR THE YEAR.

During the year 85 vessels were found to be in an insanitary condition, the following defects being notified to the Masters, Owners or Agents:—

Nature of Defects.	No. of Defects
Water tanks to be thoroughly cleaned and cement washed.	4
Water closet seats to be fitted.	2
Water closet locks to be repaired or renewed.	2
Water closet doors to be rehung.	1
Water closet chain to be repaired.	1
Water closet pans (broken or cracked) to be replaced by new.	7
Water closets (dark) to be fitted with side lights.	8
Water closets to be thoroughly scrubbed, cleaned, and painted or limewashed.	29
Water closets to be cleared of rubbish.	2
Water closets to be thoroughly cleaned and painted or limewashed.	1
Wash-hand basin to be replaced by new.	1
Wash-hand basins to be thoroughly cleaned.	2
Ventilators to be freed from packing and coverings.	2
Ventilators (Cooper's) to be repaired and made workable or renewed.	33
Straw mattresses to be re-covered.	1
Spare gear to be removed from crews' quarters and stowed in bins.	3
Side lights to be renewed.	10
Side lights to be repaired and made tight.	14
Rubber washers to be fitted to side lights.	6
Oven to be repaired.	1
Messrooms to be thoroughly cleaned and painted or limewashed.	7
Galleys to be thoroughly cleaned.	1
Food scattered over crew's quarters to be stowed in locker.	1
Food locker (door) to be repaired.	1
Food lockers to be thoroughly cleaned and painted or limewashed.	60
Food lockers to be caulked and made tight.	2
Food lockers to be thoroughly cleaned.	7
Freshing cisterns to be repaired and made workable.	2
Door of crew's quarters to be rehung.	1
Decks over crew's quarters to be caulked and made tight.	2
Decks to be cleared of offensive matter, washed down and cleaned after discharge of cargo.	2
Decks to be cleared of offensive matter, washed down and cleaned.	2
Crew's quarters to be provided with adequate means of ventilation.	4
Crew's quarters to be fumigated for the destruction of bugs.	14
Crew's quarters to be thoroughly cleaned and painted or limewashed.	33
Chain pipes to be repaired and made tight.	2
Cabin to be thoroughly cleaned.	3
Bunks to be thoroughly cleaned and painted.	2

CHIEF STEAMSHIP COMPANIES AND PORTS WITH WHICH
PLYMOUTH TRADES.

COASTWISE IMPORTS.

Aberdeen, Dundee and Kirkcaldy ...	Confectionery, fish, flour, jams, lard, oatmeal and potatoes.	Coast Lines Ltd.	Weekly.
Avonmouth ...	Grain and oil.	Various.	Irregular.
Barry, Chatham, Charlestown, Lewes and London ...	Cement.	Various.	Irregular.
Birkenhead, Barry and Swansea ...	Flour and poultry food.	Coast Lines Ltd. and various.	Weekly.
Blyth, Gillingham, New-castle and Sunderland ...	Coal.	Various.	Weekly.
Bristol ...	Canned goods, flour, fruit, milk (condensed), sugar, vegetables, cattle food, glucose, oils, paints, etc.	Coast Lines Ltd.	Weekly.
Cardiff and Swansea ...	Canned goods, dried fruit, flour, sugar, syrup; iron and coal.	Coast Lines Ltd. and various.	Weekly.
Glasgow ...	Biscuits, coffee, flour, sugar, syrup; iron and steel goods.	Clyde Shipping Co., Ltd.	Weekly.
Hull and Leith ...	Confectionery, canned goods, lard, potatoes, rice, salt fish; cattle food, etc.	Coast Lines Ltd.	Weekly.
Liverpool and London ...	Bread and cake goods, cheese, dried, fresh salt and iron, flour, grain, lard, oats, salt beef and pork, sugar, wines, etc.; lime-um, pianos, skins, wood goods, etc.	Coast Lines Ltd.	Bi-weekly.
Middlesbrough ...	Basic slag and iron work.	Coast Lines Ltd. and various.	Irregular.
Newport ...	Coal and ore.	Various.	Irregular.
Pentewan ...	Sand.	Various.	Irregular.
Southampton ...	Canned goods and lard; oil, petrol, fertilizer.	Coast Lines Ltd. and various.	Weekly and Irregular.

FOREIGN IMPORTS.

CANADA—			
Vancouver ...	Timber.	Various.	Irregular.
CHANNEL ISLANDS—			
Guernsey and Jersey ...	Fats of sorts, fruit, vegetables, etc.	Plymouth, Channel Islands & Brittany S.S. Co., Ltd.	Weekly.
IRISH FREE STATE—			
Belfast and Waterford ...	Bacon, confectionery, eggs, flour, margarine, oats, potatoes, vegetables, etc.	Clyde Shipping Co., Ltd.	Weekly.
Cork, Killeel, Kinsail, Newross, Keshmerry and Youghal ...	Oats and potatoes.	Various.	Irregular.
Dublin ...	Biscuits, stout, whisky, etc.	Coast Lines Ltd.	Weekly.
ALGERIA—			
Bona ...	Ore and phosphates.	Various.	Irregular.
AMERICA—			
Baltimore and Philadelphia ...	Grain and oil.	Various.	Irregular.
Bahia Blanca, Buenos Ayres, La Plata, Rosario, San Nicolas, etc.	Grain	Various.	Irregular.
Chile ...	Nitrate.	Various.	Irregular.
Cliveston ...	Timber.	Various.	Irregular.
BRITAIN—			
Antwerp ...	Chocolate, flour, grain, mineral waters, vegetables; bulbs, glass, manure, nails, ore, paper, wire, zinc, tapestry, etc.	Various.	Irregular.
Ghent, Torque, etc. ...	Asbestos, cement, and slates.	Various.	Irregular.
DENMARK, DANZIG, FINLAND, NORWAY AND SWEDEN ...	Matches, paper, timber, wood goods, etc.	Various.	Irregular.
FRANCE—			
La Palis, Lezardienx, Palmol, Perros, Plougastel, Roscoff, St. Malo, Treguer ...	Carrots, cauliflowers, green peas, onions, parsnips, pears, plums, potatoes, strawberries; slates and tiles.	Various.	Seasonal.
St. Brienc ...	Fruit and vegetables.	Plymouth, Channel Islands & Brittany S.S. Co., Ltd.	Fortnightly.
GERMANY—			
Hamburg and Bremen ...	Biscuits, cheese, lard, milk (condensed), potatoes, sugar; baskets, boxes (tin), brushes, carbide, earthenware, hemp, lead pipes, matches, matches, mats, paper, putty, toys, twine, etc.	Hutchinson and Bugsier Lines and others.	Fortnightly.
HOLLAND—			
Amsterdam and Rotterdam ...	Barley, biscuits, butter, cake, cheese, chocolate, cocoa, coffee, condensed milk (casks), fruit, ground rice, margarine, meat (tinned), preserves, sugar, tea, vegetables, etc.; artificial flowers, bulbs, candles, carpets, cotton goods, electric batteries, enamelware, hardware, machinery, matches, paper, rope, strawboards, toys, woodware, etc.	Holland S.S. Co., Bristol S.N. Co., and others.	Fortnightly.
RUSSIA AND RUMANIA—			
Black Sea Ports ...	Grain.	Various.	Irregular.
SPAIN—			
Cadiz ...	Salt.	Various.	Irregular.
Huelva ...	Ore and phosphates.	Various.	Irregular.
TUNISIA—			
Tunis ...	Ore and phosphates.	Various.	Irregular.

EXPORTS.

Cider apples, confectionery, potatoes, salt, cattle cake and meal, and general are sent to the Channel Islands.
Fish is sent to Italy and Spain in barrels; trawlers take large cargoes to Germany.
Bone meal, clay, glue, metal, skins, and tallow is sent to Germany. China clay is sent to America, Holland, Japan, and Sweden.

SHOWING NATURE AND QUANTITY OF FOODS INSPECTED DURING THE YEAR 1930.

II. CURED AND SALTED MEATS, ETC.		Fresh Fruit and Vegetables.—continued.	
	Tons cuts, grs. lbs.		Tons cuts, grs. lbs.
Bacon	...	Pomegranates	...
Beef, dry salted	... 1 barrel	Potatoes	... 3 c/s
Bellies	...	Rhubarb	... 1 c/s
Codfish, salted	...	Strawberries	... 4 18 0 0
Fats of sorts	...	Tomatoes	... 2 16 1 16
Hams, dry salted	...	Vegetables in brine	... 9 ctns.
Herrings (in brine)	... 1 keg		
Figs' Feet	... 1 barrel		
Pigs' Plucks	... 1 barrel		
Pork, dry salted	...		
Premier Jus	... 2 c/s		

III. CANNED AND GLASS-PACKED GOODS.		V. GRAIN.	
	Tons cuts, grs. lbs.		Tons cuts, grs. lbs.
Canned Asparagus	... 8 c/s	Barley	... 4 bags
Brawn	... 7 c/s	Barley, Pearl	... 209 10 0 0
Chicken	... 5 c/s	Maize	... 20 10 0 0
Chicken Paste	... 1 c/s	Oats	... 9 3 0 0
Corned Beef	... 120 c/s	Oats, rolled	... 2 bags
Crab	... 7 c/s	Wheat	... 10 15 0 0
Crayfish	... 2 c/s		
Fish	... 5 c/s		
Fruits	... 1374 c/s		
Fruit Pulp	... 79 c/s		
Fruit Salad	... 16 c/s		
Grape Fruit	... 5 c/s		
Herrings	... 4 c/s		
Jellied Veal	... 7 c/s		
Lobsters	... 1 c/s		
Milk	... 59 c/s		
Pilchards	... 10 c/s		
Pork and Beans	... 3 c/s		
Prawns	... 2 c/s		
Preserves	... 60 c/s		
Preserved Meat	... 2 c/s		
Rabbit	... 2 c/s		
Salmon	... 55 c/s		
Sardines	... 34 c/s		
Silds	... 16 c/s		
Soup	... 10 c/s		
Tomatoes	... 10 c/s		
Tomato Puree	... 4 c/s		
Tongues	... 27 c/s		
Vegetables	... 1 c/s		
Bottled Bovril	... 17 pkgs.		
Jam	... 4 c/s		
Mince-meat	... 3 c/s		
Olive Oil	... 20 c/s		
Sauce	... 4 c/s		
Tomato Ketchup	... 2 c/s		

VI. OTHER FOOD MATERIALS.		IV. FRESH FRUIT AND VEGETABLES.	
	Tons cuts, grs. lbs.		Tons cuts, grs. lbs.
Baking Powder	... 1 c/s	Apples	...
Beans	... 9 pkts.	Bananas	... 3 crates
Biscuits	... 25 c/s	Cabbages	... 1 8 0 0
Bran	... 5 bags	Carrots	... 93 17 0 0
Butter	... 33 c/s	Cauliflowers	... 3 casks
Cheese	... 60 crates	Cherries	... 47 boxes
Chocolate	... 3 c/s	Cucumbers	... 5 pkgs.
Cocconut	... 12 c/s	Fruit	... 2 c/s
Cocoanuts	... 72 c/s	Gooseberries	... 36 c/s
Coffee	... 49 c/s	Grape Fruit	... 72 c/s
Confectionery	... 5 casks	Lemons	... 59 c/s
Condensed Milk	... 5 bags, 4 c/s	Lettuce	... 1 bundle
Cornflour	... 16 c/s	Mandarines	... 5 c/s
Dried Eggs	... 1 brl., 8 c/s	Melons	... 329 c/s
Flour	... 1 brl., 1 ck.	Onions	... 398 10 0 0
Ginger	... 1 brl., 1 ck.	Oranges	... 24 2 0 0
Glucose	... 1 c/s	Parsnips	... 3 2 2 0
Herring Roes	... 4 bags	Pears	... 2 9 0 0
Lentils	... 57 bxs., 116 c/s	Peas	... 3 7 2 20
Lard	... 41 c/s	Plums	...
Lard Compound	... 32 c/s		
Macaroni	... 22 c/s		
Margarine	... 4 casks		
Milk Powder	... 15 bags		
Nutmegs	... 16 c/s		
Oatmeal	... 30 bags		
Oxo Cubes	... 7 kegs		
Peas	... 28 bags		
Pepper	... 1 pcl.		
Rice	... 3 bxs.		
Saffron	... 2 c/s		
Salt	... 6 c/s		
Spaghetti	... 32 1 0 0		
Speed-cock	...		
Suet	...		
Sugar	...		
Sugar Candy	...		
Syrup	...		
Tapioca	...		
Tea	... 26 chests		
Treacle	... 3 c/s		

SHOWING NATURE AND QUANTITY OF FOODS
SEIZED AND CONDEMNED DURING THE
YEAR 1930.

				Tons centls. grs.	Ibs.
Pig's Liver	...	...	...	0 0 0 0	3
<i>DIVISION II.</i>					
<i>DIVISION III.</i>					
Apples	...	2 tins	...	0 0 0	3½
Apricots	...	1 tin	...	0 0 0	2
Blackcurrants	...	1 tin	...	0 0 0	14
Brawn	...	55 tins	...	0 0 2	9
Cherries	...	232 tins	...	0 2 1	24
Chicken	...	1 tin	...	0 0 0	4
Corned Beef	...	165 tins	...	0 -7	0 27
Fruit Pulp	...	19 tins	...	0 2 1	16
Grape Fruit	...	7 tins	...	0 0 0	14
Greengages	...	2 tins	...	0 0 0	3
Jellied Veal	...	1 tin	...	0 0 0	14
Lunch Tongues	...	18 tins	...	0 0 0	21
Meat Extract	...	6 bottles	...	0 0 0	3
Mince meat	...	15 jars	...	0 0 0	15
Olive Oil	...	6 bottles	...	0 0 0	12
Peaches	...	8 tins	...	0 0 0	16
Pears	...	239 tins	...	0 4 0	10
Pineapples	...	707 tins	...	0 9 0	7½
Plums	...	19 tins	...	0 0 0	10
Salmon	...	2 tins	...	0 0 0	3
<i>DIVISION IV.</i>					
Apples	...	...	...	1 9 2	12
Cherries	...	...	...	0 0 0	20
Carrots	...	...	...	17 4 2	0
Grapes	...	...	...	0 6 2	4
Lettuce	...	...	...	0 19 2	0
Onions	...	...	...	50 17 0	0
Oranges	...	...	...	1 1 0	12
Parsnips	...	...	...	8 10 0	0
Plums	...	...	...	2 1 1	8
Potatoes	...	...	...	46 10 0	0
Rhubarb	...	...	...	0 0 0	2
Strawberries	...	...	...	0 0 1	14
Tomatoes	...	...	...	0 4 0	10
<i>DIVISION V.</i>					
Barley	...	...	...	200 0 0	0
Maize	...	...	...	0 12 0	0
<i>DIVISION VI.</i>					
Fats of sorts	...	...	...	9 0 2	10
Lard	...	...	...	0 1 0	0
TOTAL	...	...	...	340 6 0	13

DISPOSAL.

Division II.—Removed to refuse incinerator and destroyed.

Division III.—Removed to refuse incinerator and destroyed; mince meat used for rat bait in traps.

Division IV.—The major portion taken for pigs' food; remainder sent to the refuse incinerator and destroyed.

Division V.—Barley dealt with by the Glasgow Health Authorities; Maize jetisoned.

Division VI.—Fats used for manufacture into soap, candles and gelatine only; lard used to grease engine of motor launch.

TABLE 41.

CASES OF INFECTIOUS SICKNESS DEALT WITH
DURING THE YEAR 1930.

Disease.	Number of Cases Investigated.			Totals.	
	Disposed of during voyage	Landed at Plymouth.	Proceeded in Ship.	Passengers.	Crew.
Smallpox	6	—	—	1	5
Scarlet Fever ..	2	1	5	5	3
Diphtheria	1	—	1	2	—
Enteric Fever ..	3	—	8	6	5
Pneumonia	10	2	22	13	21
Dysentery	7	—	10	12	5
Erysipelas	—	1	4	3	2
Pulmonary Tuberculosis	17	10	53	63	17
Other Forms Tuberculosis	—	4	10	13	1
Malaria (contracted abroad)	13	16	165	112	82
Chicken-pox	5	12	15	26	6
Measles	7	8	47	61	1
Whooping Cough	—	2	7	9	—
Paratyphoid Fever	(2)	—	(2)	(1)	(3)
Blackwater Fever	—	1	2	3	—
Dengue Fever	—	—	2	—	2
Influenza	1	1	34	17	19
Mumps	—	—	9	6	3
Rabies	—	4	—	3	1
Ringworm	—	—	4	1	3
Scabies	—	—	2	—	2
Sprue	—	1	—	1	—
Trachoma	—	—	1	1	—
Venereal Diseases	9	20	72	33	68
TOTALS	81	83	473	391	246

TOTALS ..

90

79

595

319

245

TABLE 41.
 CASES OF INFECTIOUS SICKNESS DEALT WITH
 DURING THE YEAR 1930.

Disease.	Number of Cases Investigated.				Totals.
	Disposed of during voyage	Landed at Plymouth.	Proceeded in Ship.	Passengers.	
Smallpox ..	8	—	—	1	5
Scarlet Fever ..	2	1	2	5	3
Diphtheria ..	1	—	1	2	—
Enteric Fever ..	3	—	8	6	5
Pneumonia ..	10	2	22	13	31
Dysentery ..	7	—	10	12	5
Rhysselas ..	—	1	4	3	2
Pulmonary Tuberculosis ..	17	10	53	63	17
Other Forms Tuberculosis ..	—	4	10	13	1
Malaria (contracted abroad) ..	13	16	165	112	82
Chicken-pox ..	5	12	15	26	6
Measles ..	7	8	47	61	1
Whooping Cough ..	—	2	7	9	—
Paratyphoid Fever ..	(2)	—	(2)	(1)	(3)
Blackwater Fever ..	—	1	2	3	—
Dengue Fever ..	—	—	2	—	2
Influenza ..	1	1	34	17	19
Mumps ..	—	—	9	6	3
Rabies ..	—	4	—	3	1
Ringworm ..	—	—	4	1	3
Scabies ..	—	—	2	—	2
Sprue ..	—	1	—	1	—
Trachoma ..	—	—	1	1	—
Veneral Diseases ..	9	20	72	33	68
TOTALS ..	81	83	473	391	246

925-1929 INCLUSIVE. **TABLE 41.**

CASES OF NON-INFECTIOUS DISEASES DEALT WITH DURING THE YEAR 1930.

<i>Disease.</i>	<i>No. of Cases Investigated.</i>			<i>Total.</i>	
	<i>During Voyage.</i>	<i>Landed at Plymouth.</i>	<i>Proceeded in Ship.</i>	<i>Passengers.</i>	<i>Crew.</i>
Abdominal and other major conditions ..	4	2	18	16	8
Accidents and Violence ..	15	11	58	39	45
Cardio Vascular Degeneration	8	4	17	24	5
Chronic Sepsis and sequelæ	3	3	6	9	3
Circulatory System ..	—	—	3	2	1
Digestive System ..	14	10	234	183	75
Endocrine Glands ..	—	—	6	6	—
Errors of Metabolism or Constitutional ..	4	3	6	11	2
Excretory System ..	8	3	13	17	7
Insanity and Mental Deficiency	6	12	49	66	1
Miscellaneous	10	6	71	39	48
Neoplasm	4	6	9	17	2
Nervous System	—	4	13	17	—
Poisoning	4	—	5	9	—
Respiratory System (non-Tuberculous) ..	7	8	46	36	25
Rheumatic Fever and sequelæ	—	2	12	6	8
Skin and Eye Diseases ..	3	3	21	12	15
Specific Infectious Diseases	—	2	8	10	—
TOTALS ..	90	79	595	519	245

TABLE 41
 CASES OF NON-INFECTIOUS DISEASES DEALT WITH
 DURING THE YEAR 1930.

Disease.	No. of Cases Investigated.				Total.
	During Voyages.	Landed at Plymouth.	Proceeded in Ship.	Passengers.	
Abdominal and other mal- for conditions ..	4	2	18	16	8
Accidents and Violence ..	15	11	58	30	45
Cardio Vascular Degen- eration ..	8	4	17	24	5
Chronic Sepsis and sepsis ..	3	3	6	9	3
Circulatory System ..	—	—	3	2	1
Digestive System ..	14	10	234	183	75
Endocrine Glands ..	—	—	6	6	—
Errors of Metabolism or Constitutional ..	4	3	6	11	2
Excretory System ..	8	3	13	17	7
Insanity and Mental Deficiency ..	6	12	40	66	1
Miscellaneous ..	10	6	71	39	48
Neoplasms ..	4	6	9	17	2
Nervous System ..	—	4	13	17	—
Poisoning ..	4	—	5	9	—
Respiratory System (non-Tuberculous) ..	7	8	46	36	25
Rheumatic Fever and sepsis ..	—	2	12	6	8
Skin and Eye Diseases ..	3	3	21	12	15
Specific Infectious Diseases ..	—	2	8	10	—
TOTALS ..	90	79	595	519	245

TABLE 42.

CASES OF INFECTIOUS SICKNESS DEALT WITH DURING THE YEARS 1925-1929 INCLUSIVE.

DISEASE.	1925				1926				1927				1928				1929				GRAND TOTAL.	FIVE YEARS AVERAGE.
	HOW DISPOSED OF				HOW DISPOSED OF				HOW DISPOSED OF				HOW DISPOSED OF				HOW DISPOSED OF					
	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.		
Smallpox	7	—	—	7	3	1	1	5	7	—	—	7	1	—	—	1	2	—	—	2	22	4.4
Scarlet Fever .. .	2	—	2	4	1	—	1	2	—	—	4	4	1	—	4	5	—	—	10	10	25	5.0
Diphtheria	—	2	1	3	1	1	—	2	—	—	1	1	—	7	7	2	3	2	7	20	4.0	
Enteric	5	2	5	12	9	2	5	16	11	1	8	20	4	—	12	16	3	1	7	11	75	15.0
Pneumonia	7	5	11	23	13	5	5	23	9	1	8	18	13	4	16	33	20	3	21	44	141	28.2
Cholera	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	1	—	—	1	2	0.4
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	1	0.2
Acute Poliomyelitis .. .	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	1	0.2
Encephalitis Lethargica .. .	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	0.2
Dysentery	17	4	7	28	7	4	11	22	7	1	4	12	7	3	9	19	4	2	13	19	100	20.0
Puerperal Pyrexia .. .	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	1	0.2
Erysipelas	—	—	1	1	—	1	3	4	—	—	3	3	—	—	2	2	1	—	—	1	11	2.2
Respiratory Tuberculosis .. .	9	5	22	36	8	5	12	25	13	7	20	40	7	12	21	40	12	13	55	80	221	44.2
Other Forms	1	—	2	3	3	1	2	6	—	—	—	—	2	1	4	7	2	2	10	14	30	6.0
Malaria contracted abroad .. .	145	34	34	213	36	12	38	86	74	3	64	141	10	13	136	159	7	8	150	165	764	152.8
Chicken-pox	1	2	11	14	6	3	8	17	1	1	6	8	4	5	9	18	13	3	15	31	88	17.6
Measles	37	3	15	55	27	2	18	47	10	2	8	20	6	2	24	32	13	8	20	41	195	39.0
Whooping Cough	—	1	3	4	1	3	5	9	1	—	6	7	1	1	5	7	1	1	8	10	37	7.4
Paratyphoid Fever	—	—	(2)	(2)	(1)	—	(1)	(2)	(1)	—	(2)	(3)	—	—	(3)	(3)	(1)	—	(4)	(5)	(15)	(3.0)
Beri Beri	—	—	—	—	1	—	1	2	—	—	—	—	—	—	—	—	—	1	—	1	3	0.6
Blackwater Fever	—	—	1	1	1	—	2	3	—	—	1	1	—	2	1	3	—	1	3	4	12	2.4
Dengue Fever	1	—	7	8	2	—	2	—	—	—	3	3	2	—	2	4	—	—	6	6	23	4.6
Influenza	7	—	4	11	14	4	10	28	11	3	7	21	—	3	9	12	4	2	89	95	167	33.4
Mumps	2	1	5	8	—	—	8	8	3	1	6	10	2	2	14	18	2	—	8	10	54	10.8
Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	2	0.4
Scabies	—	—	—	—	1	—	1	—	—	—	—	—	—	—	2	2	—	—	—	—	3	0.6
Sleeping Sickness	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	0.2
Sprue	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—	—	—	2	0.4
Trachoma	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	2	0.4
Venereal Disease	9	9	12	30	13	3	12	28	15	5	29	49	13	8	39	60	7	7	65	79	246	49.2
Yellow Fever	—	—	—	—	2	—	—	2	1	—	—	1	—	—	—	—	—	—	—	—	3	0.6
TOTALS	250	70	143	463	148	48	142	338	164	26	178	368	75	57	316	448	95	58	483	636	2,253	450.6

TABLE 42.
A BRASSY THE GNIRUD CASES OF INFECTIOUS

Disease	1922		1923		Total	How Disposed of	
	Local	Imported	Local	Imported		During Voyages	Land at Plymouth
Yellow Fever	—	—	—	—	—	—	—
General Disease	30	513	—	—	343	—	—
Typhoid	—	—	—	—	—	—	—
Sore Throat	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—
Elastic	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—
Rheumatism	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—
Paratyphoid	—	—	—	—	—	—	—
Pyrexia	—	—	—	—	—	—	—
Rheumatism	—	—	—	—	—	—	—
Respiratory Tuberculosis	—	—	—	—	—	—	—
Other Forms	—	—	—	—	—	—	—
Malaria contracted abroad	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—
Paratyphoid Fever	—	—	—	—	—	—	—
Paratyphoid Fever	—	—	—	—	—	—	—
Blackwater Fever	—	—	—	—	—	—	—
Dengue Fever	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—
Mumps	—	—	—	—	—	—	—
Rabies	—	—	—	—	—	—	—
Scabies	—	—	—	—	—	—	—
Sleeping Sickness	—	—	—	—	—	—	—
Sore Throat	—	—	—	—	—	—	—
Typhoid	—	—	—	—	—	—	—
General Disease	—	—	—	—	—	—	—
Yellow Fever	—	—	—	—	—	—	—
TOTALS	463	493	470	250	720	75	148

TABLE 43.

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS.

Disease.	Cases during 1930.		Average No. of cases for previous 5 years.	No. of Vessels concerned.
	Passengers	Crew.		
Scarlet Fever ..	—	1	—	1
Pneumonia ..	2	—	3.6	2
Erysipelas ..	1	—	0.2	1
Pulmonary Tuberculosis ..	10	—	8.4	8
Other Forms Tuberculosis ..	4	—	0.8	4
Malaria contracted abroad ..	12	4	14.0	10
Chicken-pox ..	8	4	2.8	7
Measles ..	8	—	3.4	7
Whooping Cough ..	2	—	1.2	2
Blackwater Fever ..	1	—	0.6	1
Influenza ..	—	1	2.4	1
Rabies ..	3	1	0.4	1
Sprue ..	1	—	—	1
Venereal Diseases ..	12	8	6.4	15
TOTALS ..	64	19	44.2	61

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS.

Disease	Cases during 1930		Average No. of cases for previous 5 years	No. of Vessels concerned
	Passengers	Crew		
Veneral Diseases ..	12	8	6.4	15
Spirae ..	1	—	—	1
Rabies ..	3	1	0.4	1
Influenza ..	—	1	2.4	1
Blackwater Fever ..	1	—	0.6	1
Whooping Cough ..	2	—	1.2	2
Measles ..	8	—	3.4	7
Chicken-pox ..	8	4	2.8	7
abroad ..	12	4	14.0	10
Malaria contracted ..	4	—	0.8	4
Other Forms Tuberculosis ..	4	—	0.8	4
Pulmonary Tuberculosis ..	10	—	8.4	8
Erysipelas ..	1	—	0.2	1
Pneumonia ..	2	—	3.6	2
Scarlet Fever ..	—	—	—	1
TOTALS ..	64	19	44.2	61

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kats infected with Bysgne	—	180	308	182	—	108	—	—	180	121	164	122	1,624
Kats examined	142	—	—	—	120	—	113	122	—	—	—	—	—
Species not recorded	—	—	—	—	—	—	—	—	251	250	634	648	6,245
White Kats	153	620	202	491	430	405	455	211	11	53	13	12	500
Black Kats	11	58	16	50	15	6	18	18	11	—	—	—	—
Number of													

II. In Docks' Quay, Munksgaard and Munksgaard.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kats infected with Bysgne	—	—	—	—	—	—	—	—	—	—	—	—	—
Kats examined	—	1	8	—	18	—	—	—	8	4	3	40	83
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
White Kats	—	—	—	—	4	—	—	—	—	—	—	—	1
Black Kats	—	1	6	—	14	—	—	—	8	4	3	40	16
Number of													

Г. О. А. С. С. С.

TABLE 44A.

PARTICULARS RELATING TO PLAGUE "INFECTED" OR "SUSPECTED" VESSELS ARRIVING IN THE PORT DURING 1930.

Name of Vessel. 1.	Date of Arrival. 2.	Whether "Infected" or "Suspected." 3.	Methods of Rat Destruction Employed. 4.	Number of dead Rats recovered. 5.	Whether a Certificate of Deratization was issued? 6.	Remarks. 7.
—	—	—	—	—	—	—

TABLE 44B.

MEASURES OF RAT DESTRUCTION ON VESSELS FROM PLAGUE-INFECTED PORTS (OTHER THAN THOSE INCLUDED IN TABLE A) ARRIVING IN THE PORT DURING 1930, AND NUMBER OF CERTIFICATES ISSUED IN RESPECT OF SUCH VESSELS.

Total Number of Vessels arriving from Plague infected Ports. 1.	Number of such Vessels fumigated by S.O.2. 2.	Number of Rats killed. 3.	Number of such Vessels fumigated by HCN. 4.	Number of Rats killed. 5.	Number of such Vessels on which trapping, poisoning, etc., were employed. 6.	Number of Rats killed. 7.	Number of such Vessels on which measures of Rat destruction were not carried out. 8.	NO. OF FUMIGATION CERTIFICATES ISSUED ON FORM "PORT II."		Number of other Certificates issued. 11.
								Deratization. 9.	Exemption. 10.	
23	—	—	—	—	23	73	—	—	—	—

TABLE 44c.

MEASURES OF RAT DESTRUCTION ON VESSELS (OTHER THAN THOSE INCLUDED IN TABLES A AND B) AND NUMBER OF CERTIFICATES ISSUED IN RESPECT OF SUCH VESSELS DURING 1930.

Number of Vessels fumigated by S.O.2. 1.	Number of dead Rats recovered. 2.	Number of Vessels fumigated by H.C.N. 3.	Number of dead Rats recovered. 4.	Number of Vessels on which trapping, poisoning, etc., were employed. 5.	Number of dead Rats recovered. 6.	NUMBER OF CERTIFICATES ISSUED ON FORM "PORT II."		Number of other Certificates issued. 9.	Remarks. 10.
						Deratization. 7.	Exemption. 8.		
—	—	—	—	16	10	—	—	—	—

TABLE 44a

PARTICULARS RELATING TO PLAGUE "INFECTED"
IN THE PORT DURING

1.	2.	3.	4.
Name of Vessel.	Date of Arrival.	Whether "Infected" or "Suspected."	Methods of Rat Destruction Employed.
—	—	—	—

TABLE 44b.

MEASURES OF RAT DESTRUCTION ON VESSELS FROM
THOSE INCLUDED IN TABLE A) ARRIVING IN THE PORT DURING
ISSUED IN RESPECT OF

1.	2.	3.	4.	5.	6.
Total Number of Vessels arriving from Plague infected Ports.	Number of such Vessels fumigated by S.O.s.	Number of Rats killed.	Number of such Vessels fumigated by H.C.N.	Number of Rats killed.	Number of such Vessels on which trapping, poisoning, etc., were employed.
23	—	—	—	—	23

TABLE 44c.

MEASURES OF RAT DESTRUCTION ON VESSELS (OTHER
AND B) AND NUMBER OF CERTIFICATES ISSUED IN RESPECT OF

1.	2.	3.	4.	5.	6.
Number of Vessels fumigated by S.O.s.	Number of dead Rats recovered.	Number of Vessels fumigated by H.C.N.	Number of dead Rats recovered.	Number of Vessels on which trap-poisoning, etc., were employed.	Number of dead Rats recovered.
—	—	—	—	16	10

TABLE 45.

CHARACTER OF TRADE OF PORT.

PASSENGER TRAFFIC DURING THE YEAR 1930.

No. of Passengers.	1st Class.	Cabin.	2nd Class.	Tourist.	3rd Class.	Trans- migrants.	Coastwise Passengers.	Total.
INWARDS.. ..	14,873	7,096	4,324	7,048	4,986	1,022	5,653	45,002
OUTWARDS	2,604	1,510	915	555	661	—	—	6,245

Countries from which passengers principally arrive are Africa (East, South, West) ; America (Central, South) ; Australia, Canada, China, France, India, Japan, Mexico, New Zealand and West Indies.

South) : Australia, Canada, China, France, India, Japan, Mexico, New Zealand and West Indies.
 Countries from which passengers principally arrive are Africa (East, South, West) ; America (Central,

Одъезды ..	3'804	1'210	812	222	661	—	—	0'532
Привыды ..	14'213	1'006	4'354	1'042	4'626	1'033	2'623	42'005
№. of Passengers.	1st Class.	2nd Class.	3rd Class.	Domest.	3rd Class.	Passengers.	Company.	Total.

PASSENGER TRAFFIC DURING THE YEAR 1930.

CHARACTER OF TRAFFIC OF PORT

TABLE 42

TABLE 45A.

**THE VARIOUS LINES USING PLYMOUTH
AS A PORT OF CALL.**

American Merchant Line	..	New York.				
Atlantic Transport Line	..	New York.				
Bibby Line	..	Burma, Ceylon and Egypt.				
Blue Star Line	..	River Plate and Lisbon.				
British India Line	..	Indian and East African Ports.				
Canadian Pacific	..	Montreal.				
City Line	..	Indian Ports.				
Cunard Line	..	New York, Montreal and Quebec.				
Elder Dempster Line	..	West Coast of Africa.				
Ellerman Bucknall Line	..	South African Ports.	7	1	0	
French Line	..	New York and West Indies.				
(homeward and outward)						
Glen Line	..	Vladivostock.	8	18	1	12
Hall Line	..	Indian Ports.				
Hamburg American Line	..	Mexico, Central America and West Indies.				
(outward and homeward)						
Henderson Line	..	Rangoon.	0	12	0	14
Holland America Line	..	New York.				
Jamaica Direct Fruit Line	..	Kingston, Jamaica.	7	2	0	
Johnston Line	..	Pacific and Central American Ports.	0	0	2	0
Norddeutscher Lloyd	..	New York.				
Orient Line	..	Australian Ports.				
Pacific Steam Navigation Co.	..	West Coast of South America.				
Peninsular and Oriental	..	India, China, Japan, Australia, and Colombo.				
Peninsular and Oriental Branch Service	..	Australian Ports.				
(homeward and outward)						
Red Star Line	..	New York.				
Royal Netherlands	..	West Indies.				
Union Castle Line	..	Cape Town and East Coast of Africa.				
(homeward and outward)						
United States Line	..	New York.				
White Star Line	..	New York.				

THE VARIOUS LINES USING PLYMOUTH AS A PORT OF CALL.

New York	American Merchant Line
New York	Atlantic Transport Line
Burma, Ceylon and Egypt.	Bibby Line
River Plate and Lisbon	Blue Star Line
Indian and East African Ports	British India Line
Montreal	Canadian Pacific
Indian Ports	City Line
New York, Montreal and Quebec	Canada Line
West Coast of Africa	Elder Dempster Line
South African Ports	Ellerman Bucknall Line
New York and West Indies	French Line
	(homeward and onward)
Vladivostok	Glen Line
Indian Ports	Hall Line
Mexico, Central America and West Indies	Hamburg American Line
	(outward and homeward)
Rangoon	Henderson Line
New York	Holland America Line
Kingston, Jamaica	Jamaica Direct Fruit Line
Pacific and Central American Ports	Johnston Line
New York	Norddeutscher Lloyd
Australian Ports	Orient Line
West Coast of South America	Pacific Steam Navigation Co.
India, China, Japan, Australia and Colombo	Penninsular and Oriental
	Penninsular and Oriental Branch
Australian Ports	Service
	(homeward and onward)
New York	Red Star Line
West Indies	Royal Netherlands
Cape Town and East Coast of Africa	Union Castle Line
	(homeward and onward)
New York	United States Line
New York	White Star Line

Year.	Ice Creams.	Creams.	Total.
1926	—	—	539
1927	—	—	891
1928	30	—	1014
1929	45	29	1280
1930	67	23	1812
	145	52	5380

TABLE 46.

**RECORD OF FISH, SHELL-FISH, ETC., INSPECTED
AND CONDEMNED DURING THE YEAR 1930.**

					<i>Tons.</i>	<i>Cwts.</i>	<i>Qrs.</i>	<i>Lbs.</i>
Fish Inspected	..	32	..	28	..	7928	7	1 0
Fish Condemned and Destroyed	..	—	..	19	..	8	18	1 12
Shell-fish Condemned and Destroyed :								
Queens	..	336	..	40	..	0	12	0 14
Whelks	..	..	..	38	..	0	7	2 0
Escallops	..	..	..	71	..	0	0	2 0
Crabs	..	24	..	26	..	1755 in number.		
Crayfish	..	..	..	..	..	27 in number.		

Year.	1926	1927	1928	1929	1930
-------	------	------	------	------	------

RECORD OF FISH, SHELL-FISH, ETC., INSPECTED
AND CONDEMNED DURING THE YEAR 1930.

	Tons.	Cents.	Qrs.	Lbs.
Fish Inspected	7928	7	1	0
Fish Condemned and Destroyed	8	18	1	12
Shell-fish Condemned and Destroyed :				
Queens	0	12	0	14
Welks	0	7	2	0
Escallops	0	0	2	0
Crabs	1755 in number.			
Crayfish	27 in number.			

TABLE 47.

SAMPLES OF MILK, ICE CREAM AND CREAM SUBMITTED FOR BACTERIOLOGICAL
EXAMINATION FOR THE PERIOD 1926 TO 1930.

<i>Year.</i>	<i>Certified.</i>	<i>Grade A.</i>	<i>Pasteurised</i>	<i>Hygienic.</i>	<i>Ordinary.</i>	<i>Ice Cream.</i>	<i>Cream.</i>	<i>Total.</i>
1926 ..	24	336	—	32	441	—	—	833
1927 ..	18	405	19	28	421	—	—	891
1928 ..	26	386	38	28	500	36	—	1014
1929 ..	24	438	71	50	623	45	29	1280
1930 ..	20	432	81	50	639	67	23	1312
	112	1997	209	188	2624	148	52	5330

TABLE 48.

NUMBER OF PERSONS ON THE REGISTERS OF THE
PLYMOUTH AND DEVONPORT EMPLOYMENT EXCHANGES
AT OR NEAR THE END OF DECEMBER IN EACH OF THE
YEARS 1926-1930 INCLUSIVE.

<i>Date.</i>	<i>Men.</i>	<i>Boys.</i>	<i>Women.</i>	<i>Girls.</i>	<i>Total.</i>
24th December, 1926 ..	3997	183	547	177	4904
19th December, 1927 ..	4207	205	452	173	5037
31st December, 1928 ..	5302	123	645	94	6164
30th December, 1929 ..	5382	167	887	135	6571
29th December, 1930 ..	6773	138	1507	139	8557

TABLE 48.

NUMBER OF PERSONS ON THE REGISTERS OF THE
 PLYMOUTH AND DEVONPORT EMPLOYMENT EXCHANGES
 AT OR NEAR THE END OF DECEMBER IN EACH OF THE
 YEARS 1926-1930 INCLUSIVE.

Date.	Men.	Boys.	Women.	Girls.	Total.
24th December, 1926 ..	3097	183	547	177	4004
19th December, 1927 ..	4207	202	452	173	5037
31st December, 1928 ..	5302	123	645	94	6164
30th December, 1929 ..	5382	167	887	132	6571
29th December, 1930 ..	6773	138	1507	139	8557